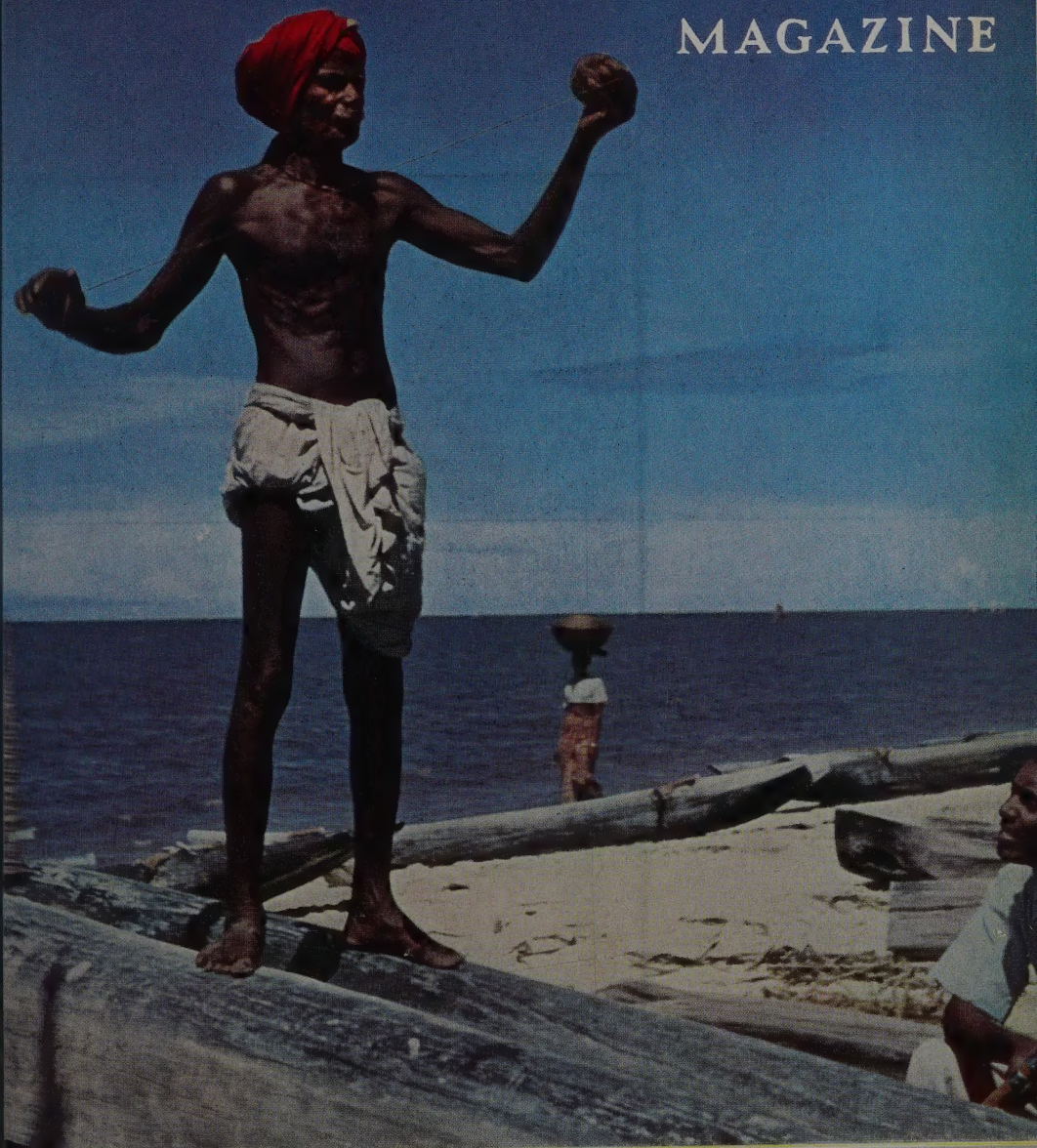


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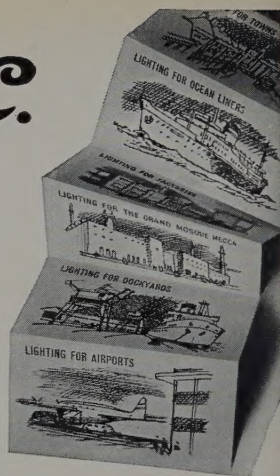


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Good from Evil: Kikuyuland Builds Anew

I. Some Effects of the 'Emergency'

by JOHN SEYMOUR

Mr Seymour has been observing changes in South and East Africa for more than twenty years. What he saw last year in Kikuyuland was so startling that, in his belief, "nothing like it has taken place in Africa before": an agricultural revolution, the nature of which he will describe next month in a second article, after here analysing the factors that have combined to bring it about

BEFORE the second World War I had the honour to serve, for a time, in a very minor and temporary capacity in His Majesty's Colonial Service. Most of the time I worked in Barotseland, in Northern Rhodesia, and I, like my fellow government servants, earned what money I got by doing work which was directly concerned with helping the Barotse (or more properly Balози) people.

The attitude of the Balози themselves to this activity interested me. It has been summed up in an oft-quoted remark: "You Europeans want to uplift us—all right then: get on with it!" In other words, the African was quite happy to be left alone; but if the government in its wisdom saw fit to send a lot of young men to do incomprehensible things to their country—well, let it. Only the young men must not expect the Balози to kill themselves working to help them.

With one or two notable exceptions (one of the most spectacular being the activities of the Kilimanjaro Coffee Growers' Association) I found this attitude to be fairly general throughout those parts of British Africa which I saw. By and large it was: "You want to uplift us—well, get on with it!"

And of course nothing effective can be done on that basis.

The Kikuyu country was no exception. For several months during the war, at different periods, I was stationed in Kikuyuland, and—having been 'in the trade' as it were—I took a mild interest in the efforts of the administration at 'uplift'. The Kikuyu reserve is overcrowded, allegedly because some of the Kikuyu land (mostly in Kiambu) was alienated for European settlers many years ago, but in fact more importantly because of improvements in hygiene which have allowed the tribe to increase greatly in numbers. Because of this overcrowding the Kikuyu were abusing

the land that they had. Over-stocking, over-ploughing of steep hillsides, over-cultivation of cereal crops like maize, and smaller and smaller yields: the usual sorry story.

The government's answer to this was terracing. The Kikuyu were to terrace their hillsides to stop the soil from washing away.

One was reminded of the old adage: "You can lead a horse to the water, but you can't make him drink!" You can lead a headman to the eroding hillside, but you cannot necessarily persuade him to exert sufficient influence on his people to force them to perform the long, difficult and laborious task of terracing. The government appeared to me to be having practically no success whatever in its endeavours.

Of course, the administration—like most colonial administrations—was understaffed and insufficiently provided with money. Such men as it had in Kikuyuland were hard-working and devoted, as many British colonial officers are, and under the circumstances these men could not have been doing more than they were. But they realized quite clearly that their efforts were having practically no effect.

After the war such of the young Kikuyu men as had been in the Services came home, and it was thought that they would be better material to work with. The government intensified its anti-erosion drive. But Jomo Kenyatta, from his house facing Mount Kenya, sent out word that the drive was not to succeed.

There are stories of people throwing themselves down in the paths of the bulldozers, to prevent them going forward. There are stories of people smashing in the night the terraces that the government had managed to get constructed during the day. The attitude was no longer: "All right—get on with it!"

It had become: "All right—get out!"

And then of course came Mau Mau.

The great majority of the one million-odd Kikuyu people were discovered to have taken a binding oath to destroy the Europeans in Kenya, or to drive them into the sea.

The story of the 'Emergency', of the fight against Mau Mau and the atrocities committed by the terrorists (and, alas, the violent reprisals of a few of their white counterparts), is already familiar. But the story of the extraordinary revolution brought about as a by-product of this disaster has hardly been told at all.

There is in progress an agricultural revolution in Kikuyuland which I believe to be the most significant thing that has happened in Africa during this century. Certainly nothing like it has taken place in Africa before. The face of the countryside is being altered before one's eyes and work which one might have expected to have taken decades to achieve— if achieved at all—is being accomplished within a matter of months.

There are two ways, I believe, in which the Government of Kenya might have reacted to the Mau Mau rebellion. First, they might have been expected to follow the: "Shoot 'em all down!" or "Hang 'em all up!" school of thought, which does not lack adherents in Kenya, as elsewhere. I can think of other countries in Africa where this alternative would have been adopted immediately, and without any argument. The other possible policy was the one that the government did in fact follow: to prosecute the war with the

utmost vigour against the terrorists, but at the same time to recognize (tacitly if not openly) that one of the deepest causes of the rebellion lay in conditions urgently requiring remedy, and that a determined attempt must be made to remedy them.

I shall endeavour to describe in another article the revolution that is in progress in Kikuyuland. Here I shall consider the factors which I believe have brought about this revolution, and which were themselves called into being by the Emergency.

The first factor to consider, perhaps, is the spending of more money.

The Government of Kenya, as well as Her Majesty's Government at home, has been shocked into action by the Emergency. The Home Government has been shocked to the extent of voting, late in 1953, the sum of £5,000,000 to be spent in Kenya on African agriculture. This money is being spent within the framework of the excellent Swynnerton Plan.

The fight against Mau Mau is costing over £1,000,000 a month, and one does hear murmurs that it is a pity that the £5,000,000 for African agriculture were not voted *before* the Emergency had broken out. Then, perhaps, there would have been no Emergency. But while we should learn from past mistakes, the most important thing is to remedy the damage done by them. Since 1946, over £1,700,000 has been spent by the Kenya Government on developing African agriculture.

This money alone, without the goodwill of the African people, would have achieved very little. In fact until two years ago it was achieving very little, in Kikuyuland at least; although in Nyanza Province and in the Kamba country some progress was made. But without the money nothing could have been done. The money was required, in American New Deal terms, to 'prime the pump'.

The factor second in importance may well have been closer administration: more European officials in close contact with the Africans.

Besides the large number of regrettably necessary troops and police that has invaded Kikuyuland another army has come in also: an army of technicians—Agricultural Officers, Marketing Officers,





All photographs by the author

The revolutionary changes that are happening in Kikuyuland spring from the shock of the 'Emergency'. (Above) A drive against Mau Mau. A gang has been located in the cover on the left: the men by the roadside are Kikuyu Home Guard. Those quenching their thirst (below) belong to the Police Reserve





Without the 'Emergency' there would have been no Kikuyu Home Guard, which has played an important part in building new social unity. The Guard has not only proved itself staunch in battle; it also acts as a focal point for peaceful activities and the Guard posts, regular little forts that now cover the country, form social and cultural centres for the people for whom they are citadels. Often the school and a dispensary, as well as a reading and information room, shelter within the defences. (Opposite, top) Members of a Kikuyu Home Guard striking force, together with police askaris. (Opposite, bottom) Kikuyu Guardsmen, helped by women, plant panjis—sharpened slivers of bamboo—for the protection of a fort. The bamboo panji originated in Burma, where African soldiers learned to use it in the war against the Japanese. It is a much more effective defence than barbed wire. (Right) The watch-tower of a Kikuyu Guard fort. (Below) The drawbridge in its lowered position.





New schools which emphasize training in sound farming practice are being started in Kikuyuland by the African District Councils. Boys of a school in Nyeri District in front of their model garden

Information Officers, Education Officers, Medical Officers and Administrative Officers. They swarm. Where, before the Emergency, there may have been one District Commissioner and two District Officers in a district, now there may be a D.C., four ordinary D.O.s and four "District Officers (Kikuyu Guard)", and nine or ten specialists or even more.

Some of us have become accustomed, in Britain, to look upon the proliferation of 'officers' as one of the diseases of the century. In countries such as ours, these people tend to be form-fillers and makers of unnecessary work. But the new 'officers' in Kenya are quite a different proposition. Lurching about the countryside in Land-Rovers, revolvers (most necessary) on hip, armed escort of tribal policemen in the back, they are doing a very real job of work, and they can see the results of their work—solid, tangible, and permanent—on the ground before them.

They have little time for filling up forms.

Third in importance among these benign factors is what one might as well call—and why hide behind euphemism?—greater despotic powers of government: a 'no-nonsense policy', made possible only by the Emergency.

Most Bantu peoples (and the Kikuyu are no exception) have been accustomed through the centuries to a large measure of democracy in their local government, combined with very strict tribal discipline. It has always been possible for chiefs and headmen to call out both men and women, in their age-groups or 'regiments', to do work of public importance. The British, with their ingrained ideas of the rights of the individual, have been reluctant to resort to such forced labour except when disguised in one way or another as taxation. They have been reluctant, also, to support chiefs and headmen in enforcing their commands in this direction. Since the Emer-

gency, however, the administration has exercised what is in fact despotic power in Kikuyuland: a stern though, as far as the loyal Kikuyu are concerned, benevolent despotism.

During my recent journeyings round Kikuyuland I found several locations (a location is the equivalent, perhaps, of an English parish) in which every able-bodied man or woman was being obliged to do five days of 'communal labour' every week. And in no location did I find the people doing less than three.

"Slavery", one may object. To force African people to work against their will on European farms is slavery; but to force them—with their tacit consent—to work to prevent their own countryside from being washed away into the sea is just plain commonsense. A Kikuyu woman said to me: "We are nothing more than slaves. We have to toil from morning to night, and we never have time even to wash our clothes!" But she added: "All this work, to the land, ought to have

been done years and years ago."

Of course much of this communal labour goes towards non-productive enterprises connected with the Emergency. The building of the Kikuyu Home Guard forts is one of them, and another is the clearing of scrub to deny cover to the enemy. But the time is soon coming when the whole of this effort will be brought to bear on to salvaging the countryside. As it is, the results are impressive enough.

Another factor of first-rate importance for the future is the new style of education of the children. Wherever I went I saw new schools, with small patches of farm-land around them which put the neighbouring countryside to shame. The headmaster would point to beautiful new bench-terraces, and tell me that each schoolchild had a section of one to cultivate for himself. If there was maize growing on the terrace it would be a good eighteen inches higher than the maize growing on surrounding hillsides. The reason for

Kikuyu Agricultural Assistants are essential to the reform of agriculture; since women till the land, female Assistants are invaluable. This one is in charge of several Young Farmers' Clubs





Many more European officials, spending far more government money, have been made available since the Emergency, notably for agriculture. They are turning to good use the labour, in such works—

this was to be seen nearby in the compost pits, and the manure pens next to the cowshed. There would be a couple of cows, well-fed and properly looked after, and fowls of some good type. There would be vegetable plots and fruit trees.

It may be objected that the purpose of education should be academic, not practical: a farmer's son should learn farming at home; at school he should get a liberal education.

But academic education, like every other activity of man, depends in the final resort on the proper treatment of the land. If men neglect or abuse the land, then they will starve. In countries where the cultivator has an inborn respect for the land, schools can devote themselves to teaching entirely academic subjects. In countries where men are not farming as they should be, good farming must be the first, and the most important, and if necessary the only, subject to be taught. Men in danger of drowning do not argue about politics or philosophy. They leave that until they have hauled themselves up onto the raft.

The K.I.S.A., or Kikuyu Independent Schools Association, was founded by a group

of Kikuyu people as far back as 1929, in reaction to certain teachings of the missionaries to which those concerned were opposed. After the War the Independent Schools became nothing less than training-grounds for Mau Mau and have been closed; and now the problem is to replace them with schools more loyal to the government. The African District Councils are making great efforts to do this. They are raising much of the money themselves and erecting the buildings, and many new schools have been started.

The next factor to consider is the formation of the Kikuyu Home Guard. This has been a development of the greatest importance in improving Kikuyu morale, and restoring self-respect.

A young District Officer in Fort Hall, whose house had been the object of several determined Mau Mau attacks and whose wife and two small children had stayed with him throughout the Emergency, told me an interesting story. When the terrorism had started the headmen and chiefs of his area came and asked him for arms. "You ask us to be loyal", they said. "But how can we be loyal if armed men come to our huts in the



—as the Mwea Irrigation Scheme (above), of detainees : men suspected of Mau Mau sympathies ; and, in the Kikuyu reserve (below), of repatriates : people sent back there for security reasons from European farms



middle of the night and force us to take the oath, and go with them to the forest? You must either give us arms to defend ourselves with, or you must give us adequate military protection."

The D.O. was faced with a dilemma. Should he give the people arms, and risk their going over with them to Mau Mau? Or should he deny them arms, and have the certainty of more recruits going to the terrorists? He chose the former course. A few rifles and shot-guns were issued to people of tried loyalty, and these people were then involved in the struggle. "I'd get them into a battle," the D.O. said. "Get them committed. Once they'd been in a battle they couldn't backslide. Mau Mau would know that they were on our side, and if they tried to join the gangs they'd be killed."

The experiment succeeded. More and more loyal Kikuyu were armed, and now there are over 30,000 armed Kikuyu Home Guard in Kikuyuland, and hardly a weapon has been lost to the enemy—in fact I failed to hear of one. Furthermore, the vast majority of casualties among the terrorists are caused by the Kikuyu Guard. The latter know the country, and they know whom to shoot, and whom not to shoot.

Everywhere in the countryside one sees the Guard posts: little fortresses surrounded by *vallum* and *fossa* (the sides of which are thickly planted with *panjis*, or sharpened slivers of bamboo), with watch-tower and drawbridge. Very often the fort contains a school, a church, and a dispensary. It is the focal point of all activity in the area, and the people manning it have achieved a new sense of unity and purpose, besides security. They have all fought battles. There was at least one battle going on somewhere in Kikuyuland every day I was in that country.

It is the fact of intense activity for peaceful purposes in the midst of a shooting war that amazes one in Kikuyuland. I saw a large gang of women working on a hillside while a small battle was being fought on an adjoining ridge between a gang of Mau Mau trying to make their escape to the forest and a detachment of Kikuyu Guard. The women went on working and singing as though nothing was happening.

One might imagine that since so many able-bodied men are in the Guard, or with the terrorists, or in detention camps, there would be nobody left to do the work. The presence of a group of people called the "repatriates" has eased this situation.

During the last half-century large numbers

of Kikuyu have left their reserve to go and work for Europeans in various parts of the Colony, and even over the border in Tanganyika. Most of them lived as squatters: that is, they were permitted to farm for themselves a certain area of a European farmer's land, in return for which they and their wives and children had to work on the farmer's fields. Many European farmers in the Rift Valley had no other labour. They preferred the Kikuyu to members of other tribes, for the Kikuyu are adaptable, and used to arable agriculture, unlike the members of the pastoral races who deem it degrading for a man to touch a hoe.

After the Emergency had started it was found that many of these expatriated Kikuyu were—like their compatriots in Kikuyuland—indoctrinated with Mau Mau. There were atrocities on farms. The government then decided to repatriate most of them to their old homes. The squatters found themselves loaded into lorries, in their thousands, and taken back to the locations where they were born—or where their fathers were born—and dumped.

At first no provision was made for these people whatever. Some went hungry, and others went to swell the terrorist gangs in the forest. Fortunately, this state of affairs was not allowed to continue indefinitely. The government eventually yielded to the demands of the men on the spot. Labour gangs were formed, camps built, protection given, and the repatriates were found useful work to do, fed, and paid the sum of thirty shillings a month; which is a good wage for East Africa.

These gangs are doing an enormous amount of work. To give a rough idea of the proportion of the work being done by repatriates, in one district—Nyeri—repatriate gangs made 180 miles of a particular sort of terracing (broad-bench) in the six months up to June 1954, while communal workers made 328 miles. Of course a great many other tasks were accomplished besides this.

Another factor that we must consider is the government policy of 'villagization' (I apologize, but I didn't invent the word).

The Kikuyu, like most people who cultivate intensively on broken, heavily wooded land with a high rainfall, do not normally live in large groups. Their huts are scattered about over the steep little ridges and valleys. For tactical reasons the government is altering this. The people are being made to congregate in compact villages, each under the protection of a Kikuyu Home Guard post. The object of this is, of course, to deny food



'Villagization.' For the first time the Kikuyu are being made to congregate in compact villages. (Above) These women are carrying freshly cut poles for the building of their new village, in which (below) the new grain stores are placed near together for defence against Mau Mau foraging parties



to the enemy.

The impression I had is that the ordinary Kikuyu cultivator is heartily sick of Mau Mau and all its works. He wants nothing more than to be left in peace. I had a good illustration of this while I was in Kiambu District. A large gang had come down from Fort Hall District and was being hounded and harried all over the countryside, as it was trying to slip away again to the Aberdare Mountains. The army was out, the police were out, and the Kikuyu Guard was out. Wherever one went one saw groups of desperadoes from the latter force, armed with everything from Sten guns to spears and bows and arrows, combing the countryside. And during this hunt *everyone* who could—even little children—came in with information as to the movements of the gang. The ordinary Kikuyu knows that the Mau Mau game is up, and wishes the Emergency to come to an end as soon as possible.

Villagization of course causes a tremendous upheaval in the life of the Kikuyu farmer. It means that he must leave the house of his fathers (which is burnt, to deny its shelter to the enemy) and build himself another hut in the new village. It means that he must probably walk several miles backwards and forwards to his fields every day. The cattle are removed from where cattle belong—on the farm—and placed in the village for safe-keeping. It is a measure of the people's desperate need for security from Mau Mau attack that they are showing great enthusiasm for the scheme. Wherever I went I saw long lines of women carrying poles and bundles of thatching-grass for the construction of the new villages.

Apart from the agricultural experts, the authorities welcome the move into villages. It makes it easier to *get at* people. If an official wishes to exhort, he can do so. There they are, all together, when he wants them. The school is in the new village, so is the church, so is the 'information room'. The new African traders (replacing the Indian ones, for a drive is being made to encourage the Kikuyu to run their own trade) can establish their shops. Craftsmen can set up their workshops. Village industry can develop. Perhaps, after the Emergency is over, most of the cultivators will return to their farms, the new villages remaining as foci for trade, industry, and culture: an enrichment to the life of the people.

The last factor to consider is the incarceration of Mau Mau suspects in detention camps.

Done as an emergency measure, it was some time before the organization was built

up to put the "detainees", as they are called, to useful work. Now, the detainees are examined by 'screening teams', and classified into Whites, Blacks and Greys. The Whites are released, the Blacks are sent to prison camps. But the Greys are posted to work camps, each containing about a thousand suspects. They are very well fed, decently housed and clothed, quite elaborate arrangements are made for their entertainment—cinema shows and the like—and they are paid for their work. They are treated much as prisoners of war would be treated. Lightly guarded, they practically never attempt to run away, although they easily could if they wished to.

The intention is that as these Greys prove their change of heart, their wives and families will be allowed to join them, and ultimately good land will be found for them, either on the areas of country that they themselves are now helping to win from the tsetse fly by clearing the bush, or on some of the new irrigation schemes that are in course of construction. Most of them are working on lands belonging to tribes other than the Kikuyu: stone-wall terracing for the Kavirondos, bush-clearing in the Kamba country, irrigation schemes for the benefit of the Suks. But all the work that they are being forced to do is on land belonging to Africans: the government has shown good sense in resisting the temptation to put them to work on roads for European motor-cars.

These, then, are the factors that, brought into being by the Mau Mau rebellion, are at this moment changing the face of the countryside. The ordinary Kikuyu is at present leading an almost intolerably hard life. Obligated to turn out for five days a week to do communal labour—most of it on other people's land—in addition to performing all the normal chores of running a farm, subjected to the upheaval of villagization, not allowed to grow the usual, secondary, 'short rains' crop of corn because for tactical reasons it is desirable to deny cover to the enemy at that time, exhorted continually by chiefs, headmen, innumerable officials, police and soldiers, and under constant threat of being raided by the gangs, his path is a stony one. But he goes on working—and even more so does his wife—with surprising willingness and good heart.

Like the government, he has been subjected to shock-treatment. And he has been shocked into throwing off the apathy of millenia: into making the move, agriculturally at least, from the Early Iron Age into the Age of Steel.

Ceylon's Buddhist Heritage

by RALPH KEENE

The author, a well-known documentary film producer, recently spent two years in Ceylon, making films for the Ceylon Government. One of these, entitled Heritage of Lanka, was a film about the ancient cities and present-day pilgrimages of Ceylon. While working on it he was able to assemble the pictures and material for the following article, which coincides with a great occasion: the revision of the Buddhist scriptures by a learned assembly that is now taking place in Rangoon

EIGHT miles to the east of Anuradhapura, ancient capital of the Sinhalese kings, a rocky hill rises out of the surrounding plains; its slopes are strewn with the pavements, columns and statuary of a past civilization, and a great stone stairway leads upwards to the summit. This is Mihintale, birthplace of Buddhism in Ceylon. At the northern end of this hill there is a steep granite crag, known as the Sila Peak; and it was here that Mahinda, son of the Emperor Asoka of India, first set foot in Lanka (as Ceylon was then called) when he came to convert the people to the Buddhist faith, over two thousand years ago. The *Mahavamsa*, historical chronicle of Ceylon, records the event in these words:

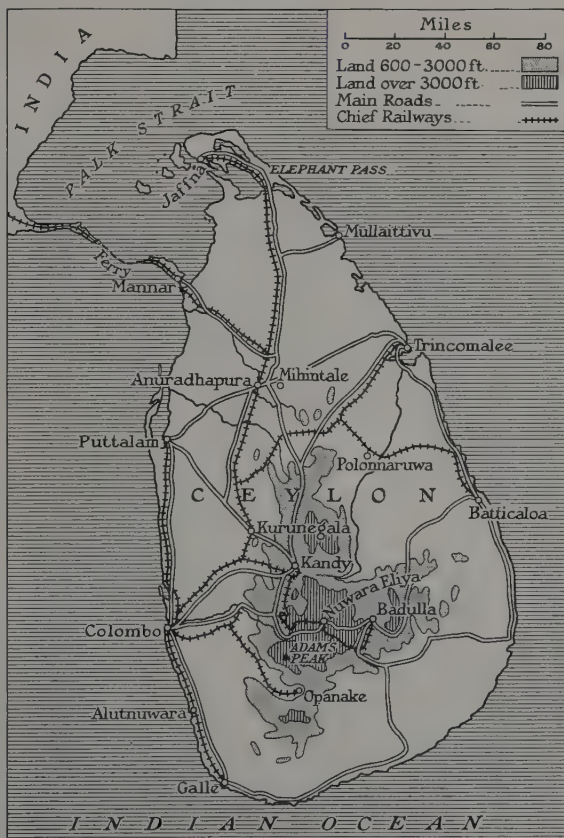
... and he, Mahinda, the *thera* of wondrous powers, coming hither with his following, alighted on the Sila Peak on the open and fair Ambatthala. . . He who was foretold by the sage as bringing salvation to Lanka alighted here, extolled by the Gods of Lanka.

And it was here at Mihintale that the king, Devanampiyatissa, when out hunting in the jungle, met Mahinda and so became converted to the faith. To mark the place where king and *thera* met, the Ambatthala *dagoba* was later built to enshrine Mahinda's relics:

... for when the king heard of his death he went thither stricken by the dart of sorrow; and when he had paid homage to the *thera*, and oft and greatly lamented over him, he caused the dead body to be laid forthwith in a golden chest, sprinkled with fragrant oil.

From Mihintale, Mahinda journeyed daily to Anuradhapura to confer with the king

about the building of the many dagobas, temples and monasteries which were to be the first monuments raised to Buddhism in Ceylon; and King Devanampiyatissa went often to visit the *thera* in his rock cell, to learn from him the precepts of the Gotama Buddha's teaching. In order that the people might go with clean feet to worship at the holy hill, the king had the whole eight miles of



A. J. Thornton

intervening roadway laid with rich carpets. Mihintale, then, was a great hill-city of monks; scattered over the slopes and the hill-sides were the *viharas* (shrines) and alms-houses, the rock cells and bathing pools, the parks and gardens of the Buddhist community. It was a retreat from the world of wars and earthly vanity, where monk and layman could seek the state of detachment taught by the Noble Sage.

All through the years Mihintale has remained a place of worship and pilgrimage, as befits the birthplace of Buddhism in Ceylon. In the words of R. G. Mitton:

For twenty centuries or more the uncovered feet of dark multitudes have ascended and descended the great stairway, their owners filled with reverent awe, and seeing visions of the mighty Buddha overshadowing the island with his presence, and of Mahinda, his apostle, alighting on the topmost crag.

At the time of the *Poson* (June) full moon, which commemorates the birth of Buddhism in Ceylon, white-clad pilgrims come in

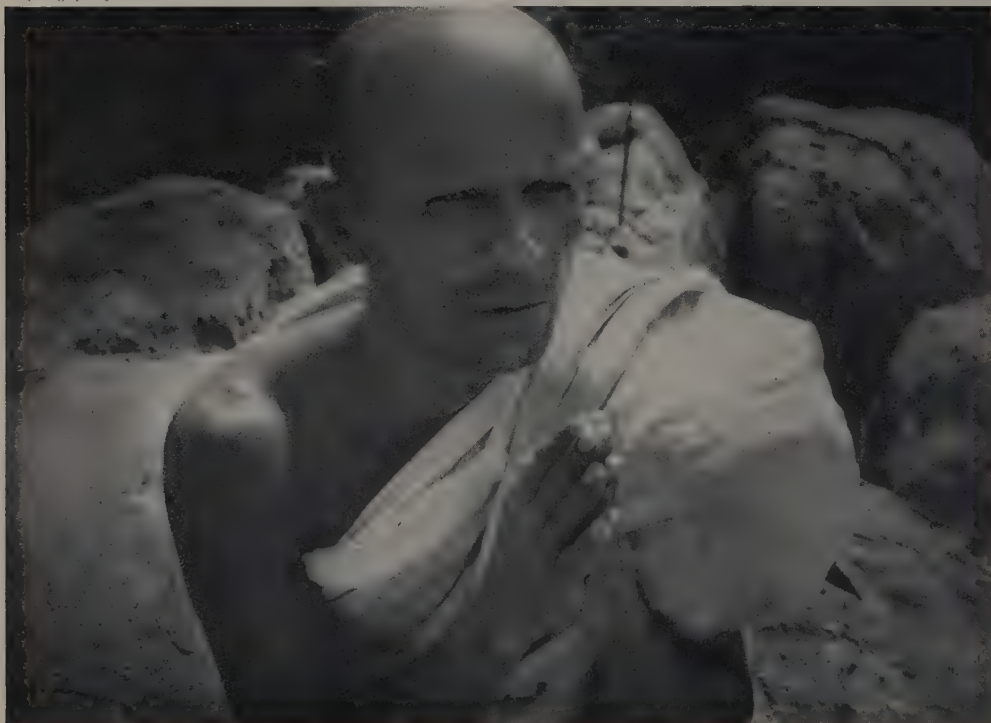
thousands to Mihintale, bringing offerings of fruit and flowers, repeating to themselves the Buddha's words:

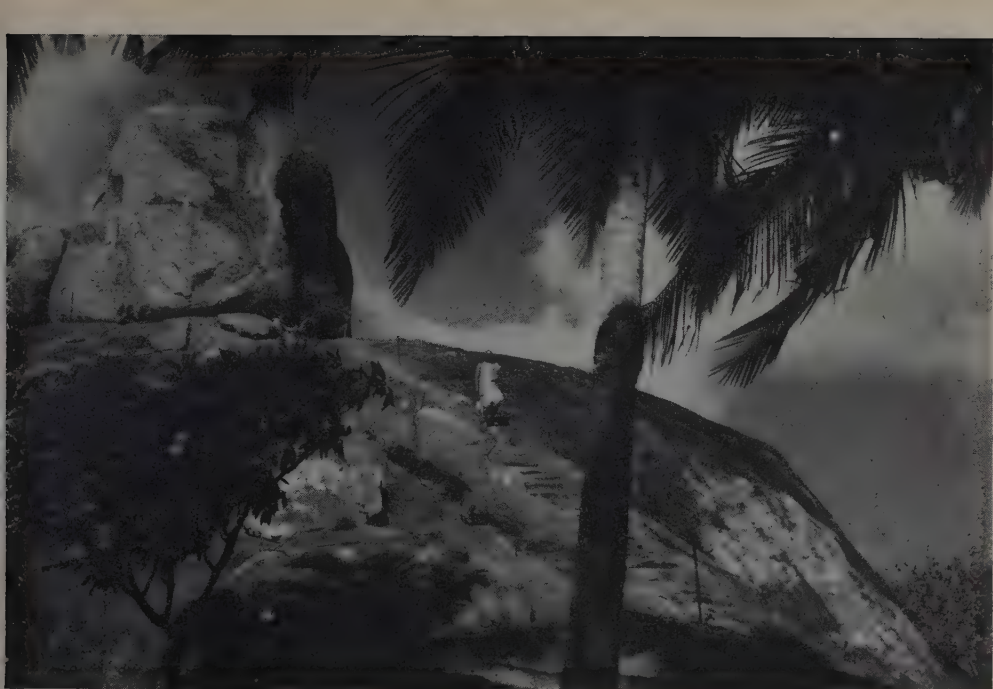
Our minds shall not waver. No evil speech shall we utter. Tender and compassionate shall we abide, loving of heart, void of malice within. And we shall ever be suffusing such a one with the rays of our loving thought. And with that feeling as a basis we will ever be suffusing the whole wide world with thought of love far-reaching.

At Anuradhapura, once a city of 3,000,000 inhabitants, are still to be seen the ruins of the mighty monuments erected by successive kings of the Mahavamsa dynasty, from the 3rd century B.C. to the 8th century A.D. The oldest of these is the Thuparama dagoba, built by King Devanampiyatissa to enshrine the Collar-Bone Relic of the Buddha, which had been sent from India at Mahinda's instigation. The exact date of its building is uncertain, but it is said by some to be the earliest Buddhist shrine still extant. Though not so impressive in size as the larger Abaya-giriya and Ruvanwali dagobas, it is, I think,

A Buddhist monk prays before the shrine on the Sila Peak at Mihintale. According to legend, it was at this spot that Mahinda, sent by his father, the Emperor Asoka of India, to preach the Buddhist doctrine to the people of Ceylon, first set foot in the island, about the year 240 B.C.

All photographs by the author





The Sila Peak at Mihintale, a sharp-pointed rock some eight miles to the north of Anuradhapura, is of great sanctity to the Buddhists of Ceylon, as marking the birthplace of Buddhism in the island. Here the Sinhalese king, Devanampiyatissa, is reputed to have met Mahinda, and so been converted

the most beautiful in all Ceylon, by virtue of its perfect proportions and the delicate carving of the stone pillars which surround it.

The Abhayagiri, largest of the Anuradhapura dagobas, is more than 450 feet in height and 360 feet in diameter. Many million tons of bricks were used in its construction, sufficient to build a town the size of Northampton. The Ruvanweli dagoba, recently restored, was built by the warrior King Duthagamini in 145 B.C. According to the *Mahavamsa* the foundations were made of successive layers of silver, copper, mountain-crystal, sweet-scented Marumba, cinnabar and butter-clay. On the stones of the relic-chamber were engraved these words: "The flowers here shall not perish; the perfumes shall not dry up; the lamps shall not be extinguished; nothing whatsoever shall perish."

But the most revered of all the shrines at Anuradhapura is that of the sacred Bo-Tree. This tree is reputedly grown from a branch of that same Bo-Tree under which Gotama Buddha reached enlightenment. It was brought from India in the reign of Devanampiyatissa and planted in the royal Mahamega park. Since then other Bo-Trees

have been planted round it, and it is difficult to be certain how much of the original tree survives. But if any of it does (and the people of Ceylon most certainly believe it to be so) it must be the oldest historical tree in the world. Many are the descriptions and eulogies of this famous tree. The *Mahavamsa* records that:

... when the great Bodhi-Tree had taken its place, all the people who had come together from the country round worshipped it with offerings of perfumes, flowers and so forth. And bringing about in such wise the good of the dwellers in Lanka, the King of Trees, the great Bodhi-Tree, lasted long time in the island of Lanka, endowed with many wondrous powers.

John Knox, a Scottish mariner shipwrecked and held captive in Ceylon in the 17th century, wrote of this tree:

I have mentioned the Bogahah Tree before, which in memory of their God they hold Sacred, and perform Sacrifices, and celebrate Religious Meetings under. Near this Tree, at some convenient distance, about ten or twelve feet at the outmost edge of the Platform, they usually build Booths or Tents . . . The whole Town joyns, and each man builds his own Apartment; so that the Building goes quite round like



Two of Anuradhapura's mighty dagobas tower above the palm-trees and paddy-fields. This city, first and greatest capital of the early Sinhalese kings, was once a thriving metropolis of three million inhabitants which ranked with Babylon and Nineveh among the wonders of the ancient world

a circle, only one gap is left, which is to pass through to the Bogahah Tree.

And there, since the ages before Christ, the Tree has been tended, guarded and watered, surrounded with the perfume of adoration and the atmosphere of prayer.

Throughout the Middle Ages, and despite periodic invasions by Tamil hordes from southern India, Buddhism remained the religion of the people of Ceylon, and temples and monasteries continued to be erected throughout the length and breadth of the island. Many of these have since been engulfed by the jungle, but others remain as a testimony to the religious fervour of those days. At Madirigiriya, deep in the central forests, a beautiful circular vihara, with many Buddha-figures carved out of granite, has recently been uncovered; while at Polonnaruwa, capital city of the Sinhalese kings after the fall of Anuradhapura, may be seen the ruins of another great monastic settlement, with its temples and palaces, libraries and almshouses, monasteries and gardens;

and there are many others, too numerous to mention. At Polonnaruwa, in a grotto known as the Gal Vihara, four monumental Buddha-figures have been carved out of a cliff-face of living rock. Two are seated, one standing, and the fourth, forty-six feet in length, reclines, its head resting on a stone pillow, in an attitude of serene relaxation. In grandeur of conception and simple nobility of execution these statues transcend all others in Ceylon. In front of each figure is an altar on which the people place their offerings: "this flower, fresh-hued, odorous and choice, I offer at the sacred, lotus-like feet of the Noble Sage."

Parakrama Bahu was the great and pious king of Polonnaruwa who caused these carvings to be made. The account of his building and good works fills nine whole chapters of the *Mahavamsa*:

... In the aforesaid town of Pulathinagara, provided thus with every luxury, like a garden made beautiful by union with the joy of Spring, which he, the king, himself enlarged, so that it was four *gavutas* long and seven broad—which



All Kodachromes by the author

The Thuparama dagoba at Anuradhapura. This is the earliest of Ceylon's dagobas, built over two thousand years ago to enshrine the Collar-Bone Relic of the Buddha. Though smaller than some later monuments, it is generally considered the most beautiful by virtue of its perfect proportions

possessed a splendid wreath of walls, which was resplendent with fair dwellings, which was an elixir to the eyes—in this town the lord of kings had many temples built.

But Polonnaruwa, in its turn, about A.D. 1200, fell before a fresh onslaught of Tamil invaders, under their merciless chieftain, Magha.

. . . and this Magha, who was like a fierce drought, commanded his army of strong men to ransack the kingdom of Lanka, even as a wild fire doth a forest . . . he broke down the dagobas and destroyed the image-houses and robbed all the treasures that were therein . . . Alas! Alas! so did the Tamil giants, like the giants of Mara, destroy the kingdom and religion of the land.

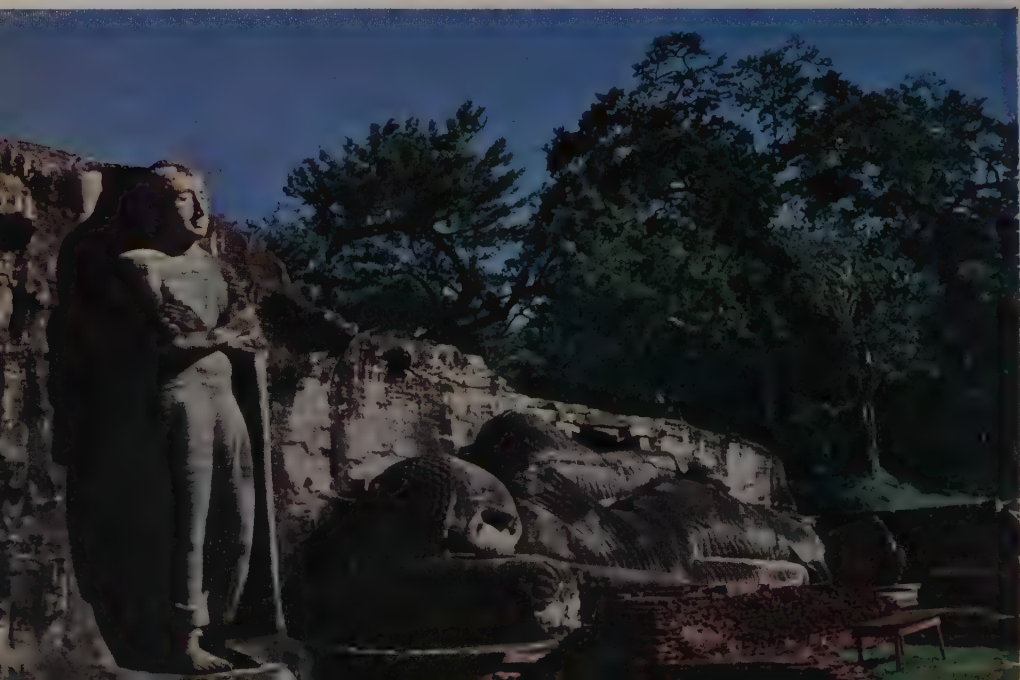
The Sinhalese retreated to their mountain strongholds in the central highlands; whither, after many vicissitudes, they brought the sacred relic of the Buddha's Tooth and enshrined it in the Dalada Malagawa at Kandy. The present temple is of comparatively recent date (not earlier than the 17th century) and architecturally uninteresting.

But, because it houses the Tooth Relic, it is of great sanctity to Buddhists. Every year, in the month of August, a *Perehera* is held, at which, in a procession of a hundred elephants, and to the accompaniment of drums and dancing, the Relic is paraded round the town in a silver casket, carried on the back of a sacred elephant.

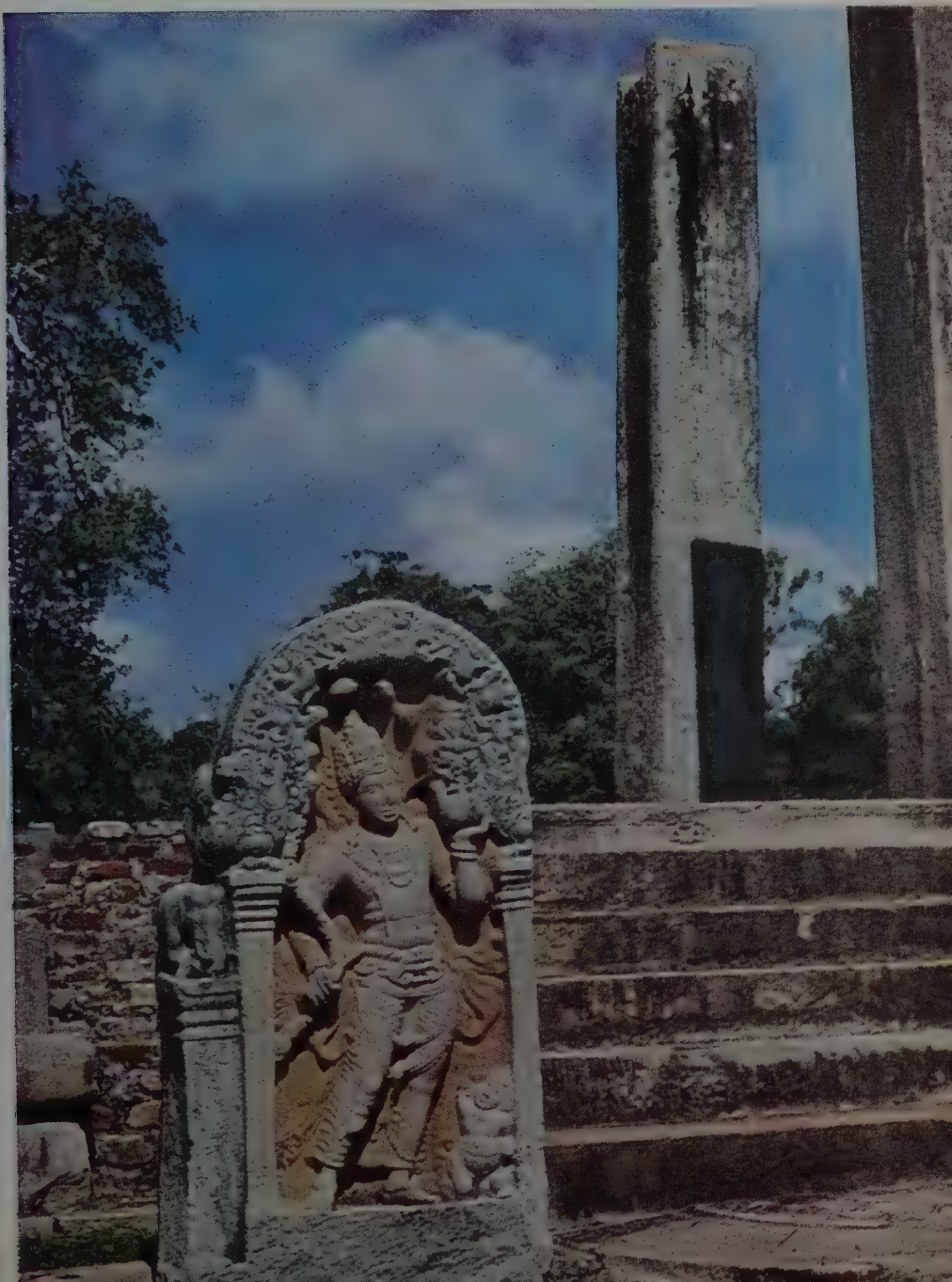
On festival days, and especially at the time of the *Wesak* (May) full moon, which celebrates the birth and death of Buddha, the people of Ceylon go in pilgrimage to worship at the island's countless shrines. Formerly they went on foot, but today they go by train, or in coaches and motor-cars decorated with sprays of the Areca-palm flower. On these occasions, at wayside villages all over the island, shelters of tree-trunk and *kadjan* (woven coconut-fronds) are erected, where pilgrims may refresh themselves with fruits and cakes and sweet-tasting cordials. These refreshments are available, free, to anyone; and once, when making the journey from Colombo to Anuradhapura during the pil-

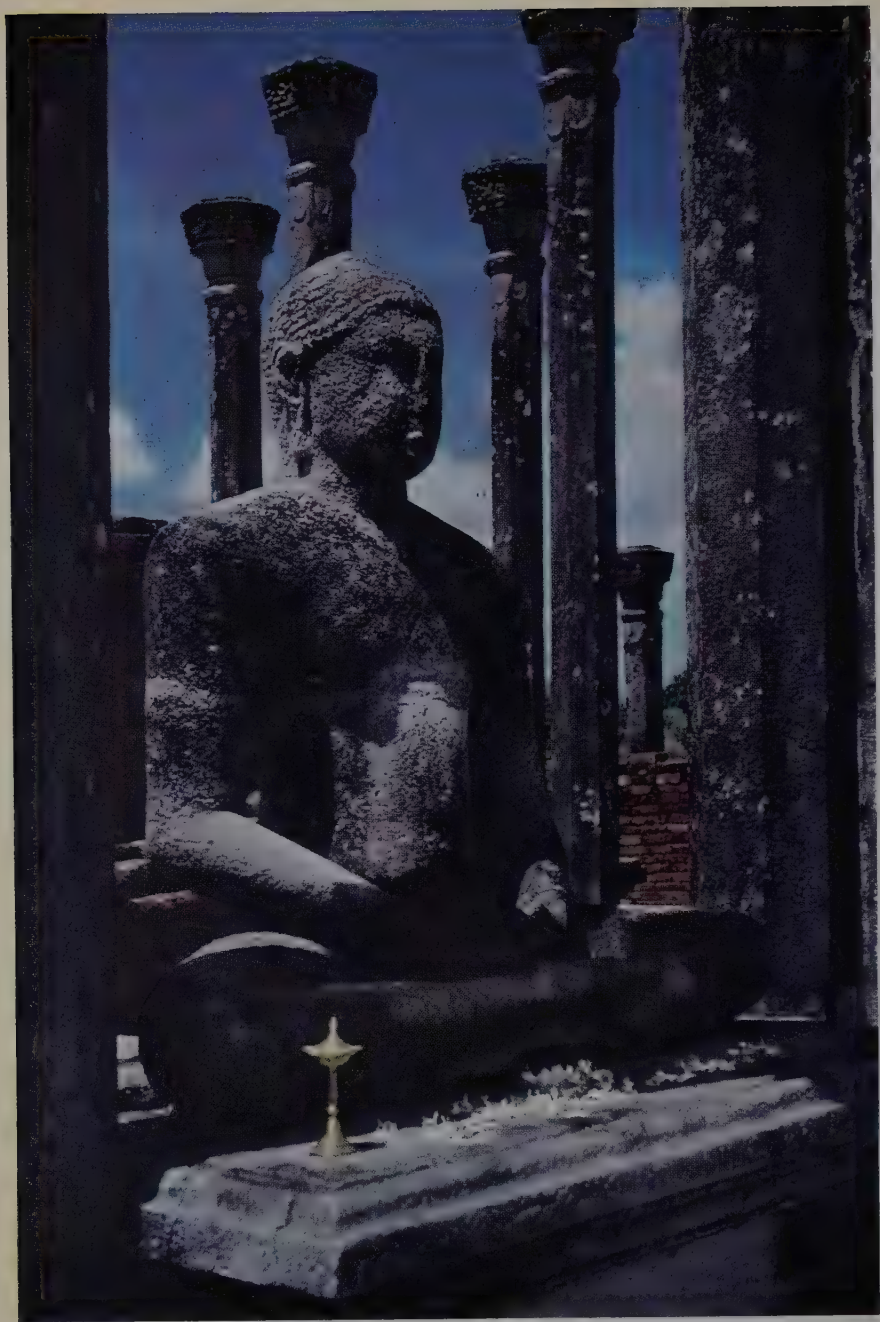


(Above) *Buddha-figures at Madirigiriya, a temple recently uncovered in the central forests of Ceylon.*
 (Below) *The colossal reclining Buddha, forty-six feet long, carved out of the rock of a cliff-face at Polonnaruwa. Beside it there stands another figure, thought by some to represent the disciple Ananda*



An ornamental 'guardstone' at Anuradhapura. These intricately carved stone slabs were worked in deep relief to represent dancing girls, court attendants and ganas (dwarfs). They were placed in pairs, and stood guarding the entrances to the temples, palaces and other buildings within the ancient city





Seated Buddha at Madirigiriya, in a circular shrine of the 12th century A.D. which stands alone amid the jungle. Oil lamps and flower offerings, brought by pilgrims, decorate the altar-slab

grimage season, I was stopped no less than eight times, while food and drink were pressed upon me. It is a gracious and charming custom, survival from those days when a pilgrimage was a long and arduous undertaking, and typical of the kindly and charitable behaviour of Buddhists on pilgrimage.

During *Wesak* week every smallest house and village is decked with flags and hung about with flickering oil lamps. In the larger towns they build high *pandals* (archways), papered with pictures of scenes from the Buddha's life and bright with neon lights. Across the streets, paper lanterns are strung; and in the courtyards of the houses they place revolving shadow-shows. Then the people crowd the pathways leading to the temples, and the altars are piled high with sweet-scented blossoms—Sal and Frangipani, Jasmine and Lotus, Na and Areca palm—for flowers are, to the Buddhist, symbols of the transitoriness of human life. "With divers flowers the Buddha I adore. Through

this merit shall I attain release. Even as these flowers must fade, so does my body march to a state of destruction."

Quietly, hands placed palm to palm, heads bowed, the pilgrims meditate upon the teachings of the Noble Sage; for Buddhism is a religion of the individual, without god-head, priestcraft or ritual. "By oneself alone is evil done, by oneself is one defiled. By oneself is evil avoided, by oneself is one purified." Each man's salvation depends upon himself; and Buddhism knows no outside Saviour who will fight on his behalf. It is the religion of Reason and the Middle Way: of freedom from earthly passion, without enslavement to asceticism. "Verily there is a middle path which opens the eyes and bestows understanding, which leads to peace, to insight, to the higher wisdom, to Nirvana."

According to legend, the Gotama Buddha visited the island of Lanka three times: once at Alutnuwara, once at Nagadipa, a tiny

Pilgrims pray at a flower-laden altar during Wesak week, a traditional season of pilgrimage at the time of the May full moon, which commemorates the birth and death of the Gotama Buddha. "This flower, fresh-hued, odorous and choice, I offer at the sacred, lotus-like feet of the Noble Sage"





Dagobas at Mihintale, "the birthplace of Buddhism in Ceylon."
The dagoba is the traditional monument of Buddhism, and is to be found, in varying forms, in all the Buddhist countries of Asia. It consists of a hemispherical dome of solid brick, surmounted by a square block and crowned by a conical spire. In the upper part of the dome is a walled-in chamber housing sacred relics. Some of the dagobas in Ceylon are enormous: one at Anuradhapura is 450 feet high and 360 feet in diameter



(Above) Pilgrims at Mihintale during Posen week. They carry offerings of flowers ; and bricks to repair the fallen dagoba at the summit. (Below) A Sinhalese family rests beside the great stairway before making the final ascent. Behind them pilgrims climb the hillside on their way to Mahinda's shrine





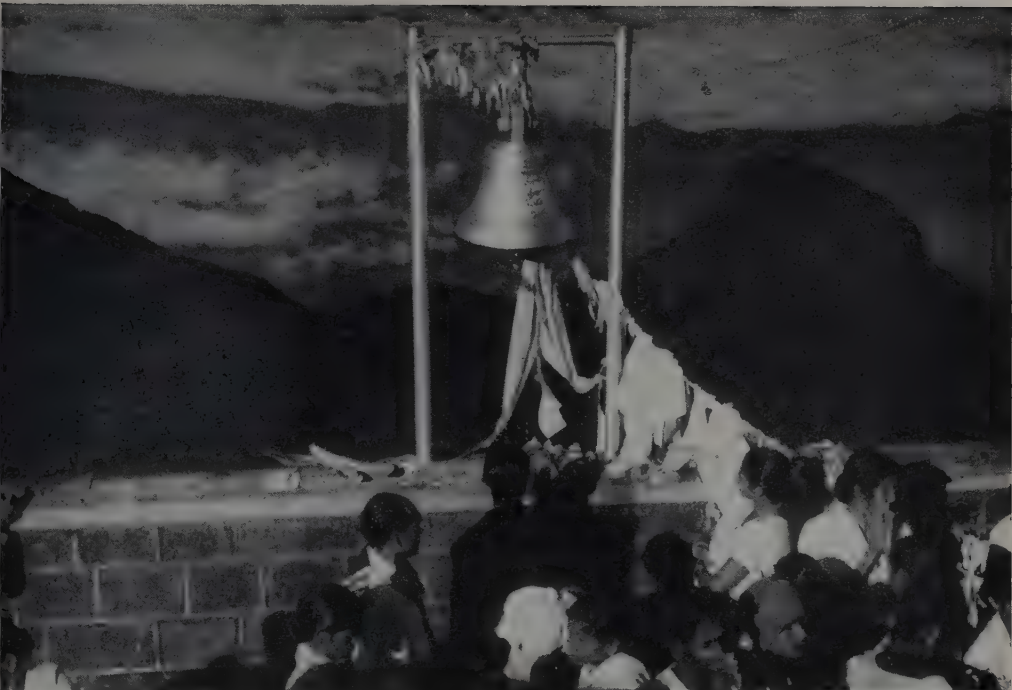
Pilgrims coming down through the tea plantations after making the ascent of Adam's Peak, probably the most sacred mountain in the world. On its summit there is an imprint in the rock which Buddhists believe to be that of the Buddha's foot; they acquire great merit from worshipping there

island off the north-west coast, and once at Kelaniya, a few miles outside Colombo. At each of these places temples have been built to commemorate the event, and they are shrines of special sanctity to the Sinhalese Buddhist. When the Buddha rose into the air to leave the island after his third visit, his foot touched the summit of Sumanakuta (Adam's Peak), and left its imprint there. For this reason it is called *Sri Pada*, the mountain of the Holy Footprint, and is a focus of pilgrimage for Buddhists from all over the world.

The summit of this sharp-pointed peak rises 7300 feet above sea level, clear above the jungle-covered wilderness in the centre of the island. It takes four or five hours' steady climbing to reach the summit, and for this reason it is usual to make a start in the middle of the night, in order to be at the top in time to see the Sunrise and the Shadow. The first mile or so is comparatively easy going, over gently undulating ground, along tea-estate roads. The black conical mass of the peak, nowadays with a chain of lights

marking the pathway to the top, looks deceptively near in the darkness, as the tranquil tide of pilgrims flows gently upwards. Every now and again the silence is broken by an impromptu cry of "*Sadhu!—Sadhu!—Sa-a-a!*" (Hail!—Hail!—Hail!), the last long-drawn-out note being taken up in chorus by those around. Then, suddenly, the character of the climb changes. The path plunges into thick jungle, and a flight of stone steps confronts the pilgrim. From this point there is scarcely a break in the dark, damp tunnel, nor a pause in the steeply ascending stairway, until the top is reached.

The pilgrim acquires great merit from making the ascent of *Sri Pada*; and the more times he makes it, the greater the merit. So there are always to be seen in the crowd men and women of great age or infirmity, who are assisted up the long and arduous slope by friends or relatives, who themselves acquire additional grace by this act. The whole route to the top is lined by rest-shelters, tea-stalls and eating-houses, and lit by electric lamps. But these amenities are of recent date, and



(Above) *As the first rays of the rising sun light the mountain-tops, pilgrims who have climbed the 7000-foot ascent to the shrine of the Holy Footprint on Adam's Peak strike the bell on the summit.*
(Below) *Pilgrims wash themselves in a stream and put on clean clothing after climbing Adam's Peak*



not so long ago the pilgrimage had to be made by the light of smoking torches, through tangled jungle and across rough, slippery rock slopes. There was one spot in particular, where a huge overhanging cliff had to be negotiated by scaling the links of iron chains. Then, with the chains swinging wildly in a sudden tropical storm, it was not unusual for the pilgrim to be broken against the rocks, or hurled to his death in the forests below.

At the summit a concrete platform, about thirty yards square, has been built. In the centre of this a small, roofed platform houses the imprint of the Buddha's Foot—an irregular indentation, about two yards long, in the living rock. As dawn approaches, the whole of this area is packed tight with pilgrims, huddled close together against the bitter winds which blow at this great height. From time to time a large bell is struck by a pilgrim, once for every time that he, or she, has made the ascent of the mountain. I heard some elderly worshippers sound the bell twelve or fourteen times.

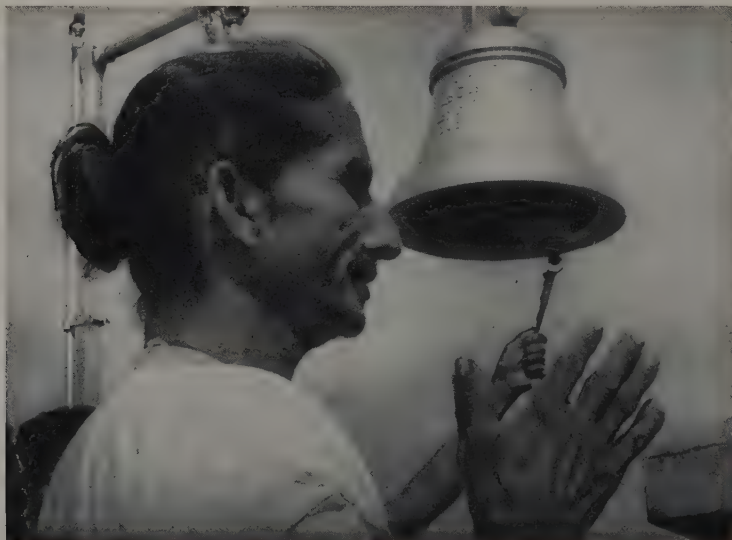
And then, at last, the sky begins to lighten. Imperceptibly, the hills and valleys around and beneath begin to take shape, and the faces of the patiently watching throng become visible in the pale, pre-dawn light. Slowly the cold grey sky is washed with the warmer tints of the rising sun. Then, all of a sudden, a great fan of golden rays shoots up into the heavens—and a moment later the rim of the sun itself breaks the horizon above the far-away hills. This is the moment for which

everyone has been waiting, a moment of ecstasy and awe. An involuntary gasp of wonderment rises from a thousand throats: "*Sadhu!—Sadhu!—Sa-a-a!*"

Almost immediately, on the opposite side of the mountain, the Shadow of the Peak begins to appear. It is like a cone of darker air suspended in the morning sky, its apex pointing high into the heavens, its base stretching across the hills and the mist-covered valleys to the west. The voice of a chanting monk breaks upon the stillness, amplified through loud-speakers set round the central shrine. The pilgrims kneel and touch their foreheads to the ground. They repeat to themselves the precepts of the Buddhist faith: "I will not steal that which belongs to another . . . I will not bear false witness . . . I will not destroy any living thing . . . I will not indulge in sensual pleasures . . . I will not consume strong liquors."

The bell clangs and clangs again, and a continuous stream of worshippers push their way up the crowded steps to offer gifts at the shrine of the Holy Footprint. For it is written in the *Mahavamsa*:

And when the Teacher, compassionate to the whole world, had preached the doctrine there, he rose, the Master, and left the traces of his Footprint plain to sight on Sumanakuta . . . Thus the Master of Boundless Wisdom, looking to the salvation of Lanka in time to come, visited the island three times . . . Therefore this isle, radiant with the light of Truth, came to high honour among sacred believers.





Progress in East Pakistan

by BASIL GREENHILL

A characteristic scene in East Pakistan: rivers, trees and jute fields repeated ad infinitum

The new government in Pakistan is basing its hopes upon administrative reform and economic progress. In speeding up the latter it will start with the advantage of much already accomplished. Mr Greenhill, until recently a member of the United Kingdom High Commission in Pakistan, shows what development has been effected since 1947 in the potentially rich eastern half of the country

BEFORE the partition of the Indian sub-continent in 1947 the country which is now East Pakistan was a backwater, "a sort of backyard or kitchen garden for the great industrial centre and seaport of Calcutta" as Ian Stephens described it in his article on "Pakistan's Economic Prospects" in *The Geographical Magazine* for June 1953. It was known to most Europeans as a hot wet country with very bad communications, where the jute for the Calcutta mills was grown by people who lived on rice and fish. The only port was the old Arab haven of Chittagong in the south-east, not far from the Burma border, which had room for only five ships. The capital, the ancient city of Dacca, was no more than a sleepy District town. There were almost no industries and no power. The public works, roads, irrigation schemes, hospitals, schools and cantonments which had over many years been progressively developed in what is now West Pakistan were conspicuously absent in the eastern part of Bengal. While West Pakistan started its independent life with great

assets, East Pakistan began almost from scratch.

When East Bengal became East Pakistan, its 32,000,000 Muslims and 9,000,000 Hindus forming together more than half the population of the whole new country, the problem of its development became urgent. Many people thought that its continued independence of eastern India was impossible and that both economically and politically East Bengal would soon have to rejoin Calcutta. After all, Bengal had been partitioned before, from 1905 to 1912, and the division was annulled, though it left behind it a legacy of buildings in Dacca which were to prove most useful as the nucleus of a new administrative capital.

But these prophets were wrong. The Bengali Mussulman has his own individual culture and his country had not always been poor and neglected. To the Moghuls, who as Central Asians found its humid, but by no means arduous, climate very uncomfortable it was known by a phrase which may be roughly translated as "a hell, but a hell filled

The author



A river sailing-boat from the Brahmaputra delta, deep laden with jute. These boats are interesting from an archaeological point of view, being very like models found in Egyptian tombs. Their construction is unusual, inasmuch as the skin is built first, after which the frames are inserted into it



(Above) A big Dacca cargo-boat being rowed down river. Owing to the design of their sails and hulls these boats are unable to tack. (Below) A waterside market to which the produce is brought by boat. The rivers are the highways of East Pakistan: no village is more than a mile from a river

From





The author

East Pakistan's paddle-steamers are British-built: they are cargo-boats, passenger-boats and towing-boats. (Above) A towing-boat taking two barges or 'flats' round a sharp bend in the river, an operation needing great skill and much 'backing and filling'. (Below) A crowded passenger-boat

The author



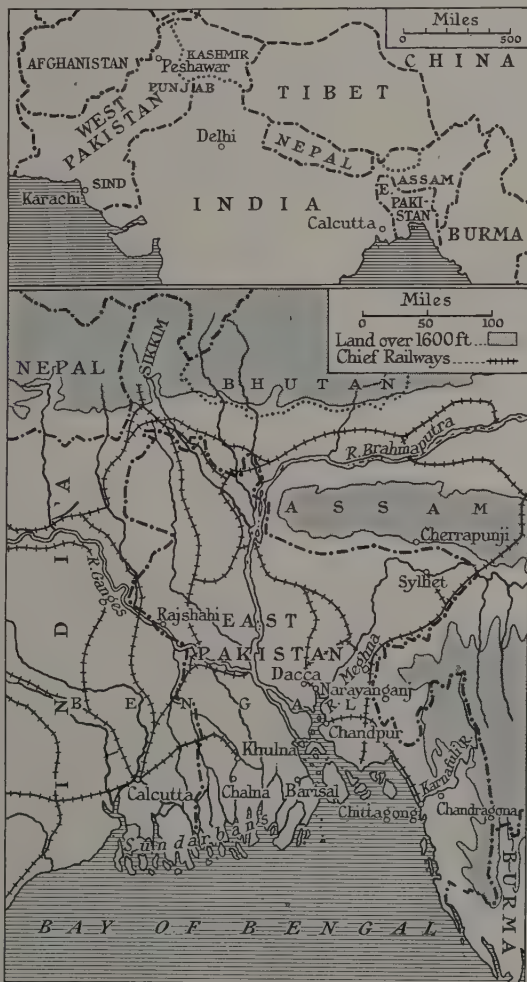
with good things". The finest muslins, pearls, gold and silver work came from Dacca. The Bengalis' skill in building in bamboo influenced the development of Moghul architecture. As boatmen and boatbuilders they had always been unsurpassed. From the wet river islands of East Bengal, and from its borders, came the best soft fruits and the best fish, while its rice was exported as far as Peshawar and Singapore. Increases in population beyond what a primitive technology could sustain and the development of Calcutta far away on its western edge had ruined East Bengal. From a food-exporting country it had become one of chronic deficit, and most of its people were very poor.

Given improvements in agriculture, better communications, ports and industries to process its own abundant raw materials, the country could become rich again. But the problems of its development were enormous. I will remember my first journey to Dacca. We flew from Calcutta one hot sticky afternoon at the end of the monsoon over what seemed a vast lake dotted with islands. More than half the country was under water. Then Dacca itself appeared, almost an island surrounded by fens and small streams, offshoots of the great rivers of East Pakistan, the Brahmaputra, the Ganges, and the Meghna, as they run down through their common delta into the Bay of Bengal.

Between them these rivers drain most of northern India, the Eastern Himalayas, and part of China. The Brahmaputra is unbridged throughout its length and in Pakistan it is probably unbridgeable. At Chandpur, still seventy miles from the open Bay of Bengal, the combined major rivers form a sheet of water seventeen miles wide dotted with islands and mudbanks. The smaller streams, many of them as broad as most rivers in Europe ever are, flow together and separate again. They form great fens and winding canal-like ditches—*bheels* and *khals* as they are called in Bengal—and lakes miles across, so that large parts of East Pakistan present an intricate pattern of forests and

lakes, fields of jute and rice, marshes and rivers, all washed by one of the world's heaviest rainfalls. As Mr Jassimuddin, one of the leading poets of East Pakistan, once told me, there is no village in the country more than a mile from navigable water.

But this rainfall is distributed very unevenly over the year. From the 70 inches which fall in Dacca itself to the 170 or so which fall in the Sylhet valley below Cherrapunji—famous in school geography books as the wettest place on earth—almost all the rain comes in the five months from May to September. For the rest of the year the climate is humid but not wet.



A. J. Thornton



courtesy of Braithwaite & Co. Structural Ltd

New jetties at Chittagong, near the mouth of the Karnafuli River, East Pakistan. Although it has been a port for a thousand years it was not until Partition that Chittagong became of great economic importance. Since then its capacity has increased nearly five-fold and is still growing

For six months there is therefore a shortage of water on the ground where the crops are grown a few feet above the level of the rivers. To a very small extent this is overcome by primitive manually operated lift irrigation. In the cold weather as you walk among the rice-fields, neatly banked off from one another in the almost dry beds of summer rivers, the landscape is dotted with the swaying figures of cultivators working the simple pumps used to lift water from one field to another. However, what is really needed is a widespread abundant supply of water all the year round, so that two crops of rice can be grown each year on vast areas of fertile land which at present grow only one.

Several hundred small local irrigation schemes already completed or due to be finished in the near future will allow hundreds of thousands of acres to be cultivated twice a year. This alone will add over 250,000 tons

to the Province's annual crop of food-grains (rice, wheat, etc.) of about 7,000,000 tons. But to obtain the extra million tons still needed to convert East Pakistan into a country with a food surplus something much larger is needed. With the help of experts from the United Nations Food and Agriculture Organization a plan has been made for a vast and ambitious multi-purpose scheme to harness both the Brahmaputra and the Ganges for irrigation and electric power. If this scheme is ever carried out in full it will certainly change the face of East Bengal. A start is to be made in the near future with the first part of it, the Ganges-Kobadak scheme, which will irrigate over 2,000,000 acres of the south-western part of the Province, where there is a bad food-shortage. The Ganges-Kobadak scheme should produce nearly 750,000 tons of extra food. Its main irrigation channel will provide a linking waterway up which large

river-steamers will be able to sail from the Bay of Bengal to the Ganges.

In such a country as East Pakistan the building and maintenance of roads and railways is disproportionately expensive. By far the greater part of the goods moved goes by inland waterway. For nearly a hundred years the backbone of the water transport system has been the paddle-steamers of the Joint Steamer Companies, two British firms which have their own organization for pilotage, marking and lighting of channels, and even for the training of the river channels. To steam down the great rivers of Pakistan is as pleasant a form of travel as I know. The whole life of the country passes you by. The isolated villages of bamboo huts among the tall trees, the great open stretches of the jute fields, light green early in the season, deeper-coloured before they are cut, the river sailing boats in their hundreds, the fishermen, and

the *dhobies* with their piles of washing at the village steps.

With the development of East Pakistan the steamer companies have reorganized and expanded their services, and built new ships. A shipbuilding yard has been developed at Barisal where great deep-sea barges of 600 tons have been erected from parts made in Britain. These have been put into service with their attendant tugs to keep open communications across the open water between Chittagong in the Bay of Bengal and the mouths of the rivers during the storm period before and through the monsoon. The Pakistan Government has purchased and put into operation a fleet of deep-sea barges for the same purpose. A pilot project to determine the most suitable types of ships for the river service has been started with the cooperation of the Economic Council for Asia and the Far East. Photographic and aerial surveys of the rivers are

Elephants and men at work during an early stage in the building of the Karnafuli hydro-electric scheme. This will not be completed for some years; when it is its capacity will be 100,000 kilowatts and it will provide electricity for the southern part of East Pakistan and for Chittagong

From the





From the author



Jute is by far the most important product of East Pakistan. It is planted in the cold weather when the land is out of the water: during the monsoon season it grows under deep flood-water and when this has again subsided it is ready for harvesting. (Above) Weeding out the young plants. In the background are banana trees, a staple food which is not exported. (Left) Harvesting jute: the stalks are cut close to the ground and are 'retted' or broken down into fibres



Most of the jute is exported to Dundee and elsewhere but some is now processed in East Pakistan: several modern mills for spinning and weaving it into fabrics have been built since Partition

being made. Thirty-six dredgers ordered by the Provincial Government—for at Partition East Pakistan found itself with only one dredger for over 2500 miles of scheduled steamer routes—are now being delivered.

But however much river transport in this part of Pakistan may be developed—and there is every indication of its great future—by far the greatest bulk of cargo will still be carried by the square-sailed river boats which have changed little in design for perhaps a thousand years. One expert has calculated that these most graceful craft carry between ten and twenty times as much cargo each year as all the steamers and the railway put together. There are probably more than 100,000 of them and they employ a large percentage of the population. They are as much a part of the Bengal scene as camel-trains are of that in Central Asia or red buses are part of a London street. There is a type of sailing boat for every service on every river. The culture of the boatmen is very much a part of the life of East Pakistan. They have their own songs and music, their own tales and traditions.

Passing a large part of their days on the great rivers they come to know them intimately and to respect them as the masters of their lives. Some boatmen develop almost a sixth sense in finding their way through the maze of waterways on voyages sometimes five hundred miles long. I have several times asked boatmen how they navigate, but never received an answer better than that they know the way “from the flow of the water”, as did their fathers before them.

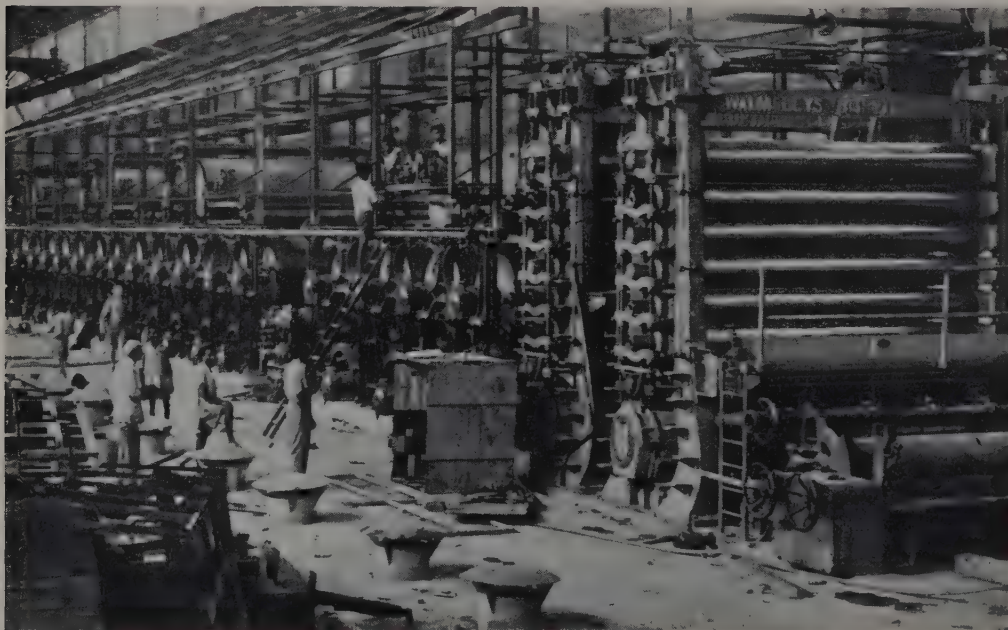
Expensive as roads are, the Provincial Government's road-development project foresees the doubling of the country's 750-odd miles of high-grade roads in the course of the next six years. East Pakistan inherited over 1500 miles of the old Bengal-Assam railway, but only a third of this was of broad-gauge track. The engines and rolling stock were worn out after years of hard work in support of the Burma campaign. The railway system was designed to serve focal points which no longer existed after Partition and gave poor service to those now becoming important. Now new lines have been laid and many new locomotives



From the author

(Above) A Manipuri from the Sylhet district weaving at home. In East Pakistan there have long been village industries producing silk and cotton fabrics for local use and the famous Dacca muslin for export. (Below) Outstanding among the country's new industrial plants : the Chandragona Paper Mill

From the author





From the author

Although the development of social services in a new state is a major undertaking, East Pakistan is progressing in this respect. In the neighbourhood of Dacca are (above) the Veterinary College, important in a community which largely depends on the bullock, and (below) the new T.B. Hospital

From the author



tives, carriages, and goods wagons have been delivered or are on order.

The most important line in East Pakistan runs from Dacca to Chittagong. This old haven, through which Islam perhaps first entered East Pakistan a thousand or more years ago, has changed out of all recognition since the years when it was a port of entry for the war in the Assam jungles. In 1947 there were berths for only five ships. Now sixteen vessels at a time can be handled and a vast improvement scheme of marshalling yards, new jetties, great cargo-sheds and warehouses is under way. In the year 1947-48 Chittagong handled 400,000 tons of cargo. Six years later nearly four-and-a-half times as much is passing through and the major part of the world's jute is now handled by this former satellite of Calcutta.

It is in its ports that East Pakistan's development is perhaps most obvious. Since Partition an entirely new river-port, Chalna, has been created many miles from the open sea on the River Pussur south of Khulna in the western part of the Province. This deep, broad and easily navigable stream, flowing out through the dense jungle of the Sundarbans, was opened to seagoing ships in December 1950. Three years later it was handling more cargo than Chittagong could handle at the time of Partition. Chalna is a surprising port. As you approach it in a launch from the north you first see a group of 10,000-ton steamers sitting, apparently, among the rice-fields. The anchorage is perhaps a mile wide.

To develop industry a new country with a seaboard needs communications, ports and power. Before Partition East Pakistan had little or no power and the slow development of power-stations since has been one of the main brakes on industrialization. There is one important hydro-electric scheme, on which construction work has already begun, on the Karnafuli River between Chittagong and the Burma border. It will be many years before this plant is in full operation, but when it is 100,000 kilowatts should be available from it. In the meantime steam and diesel stations are being built at Narayanganj, the jute industries town near Dacca, at Chittagong and at Khulna. Between them these should cater for the needs of the newly established and expanding industries.

The most impressive of the industrial developments are, perhaps naturally enough, connected with the Province's greatest product, jute. The Adamjee jute mills at Marayanganj, the building of which began only in 1950, are already exporting finished jute

goods to the United States as well as helping to meet the home demand. In a year or two's time 3000 looms should be at work. These great mills, among the most modern of their kind, provide a strange contrast with the villages of the surrounding countryside where the life of the cultivators goes on much as it has done for hundreds of years. Six other jute mills are being built, a great paper mill at Chandragona near Chittagong is already in production, match factories, a flour mill at Dacca, a new cotton mill, a rayon mill, a cigarette and tobacco factory and numerous smaller enterprises are being built or have already begun work. Oil is being sought in several parts of the Province.

The problems of development in a country where the pace has for so long been set by the rhythm of the planting and harvesting of jute, rice, and sugar and by the slow pace of its chief means of transport, the river sailing boat, are considerable. The development of first-class communications is limited by natural conditions, workers in many trades must be trained from scratch, the administration has to find its feet and the people become accustomed to a way of life quite unfamiliar to them. The development of the social services, health, education, housing, which must keep pace with industry and a rising standard of living, presents great problems.

Nevertheless, there has been progress in these spheres too. Dacca University has greatly increased its number of students. It has fine material on which to draw. I have met many of its undergraduates and got to know some of them well. Among them are young men and women of great potentialities. A new university has been founded at Rajshahi on the Ganges, a scheme for the slow introduction of compulsory primary education is under way, hospital and medical training facilities have been expanded. Dacca itself, like Chittagong, has acquired whole new suburbs of middle-class houses where a few years ago there was only jungle.

It will be some time before the ordinary man in the village sees changes in his daily life of the kind which widespread electrification has brought to the remote districts of the North-West Frontier Province and expanding irrigation to the Punjab and Sind. But the foundations of such improvements are already laid. If all goes well the sons of the present generation of tough wiry boatmen and hard-working cultivators who make up the bulk of East Pakistan's population should enjoy a higher standard of living than this area has seen for many years.

The Cambridge Plan

by MAX LOCK, F.R.I.B.A., M.T.P.I.

Interest in Cambridge is widespread throughout the English-speaking world; and for the benefit of readers disturbed by rumours of dispute we have obtained this report from Mr Lock, a consultant who has produced plans for Middlesbrough, the Hartlepoons, the Portsmouth District and Bedford

THE controversy over the Cambridge Plan has thrown into sharp perspective some interesting facets of British life and character. The best of these is the deep concern that Britons all over the world feel for Cambridge as distant children feel for a beloved and gracious parent, whom they wish to grow old gracefully and without pain. The controversy, coming at the ill-timed moment of the Crichton Down scandal, has added a certain amount of fuel to the latest fires of public resentment. Anything that smells of high-handed action by top-level bureaucrats is indeed dynamite in the hands of those who claim to champion the man-in-the-street. On the other hand, in a country that seems content to remain somewhat passive and indifferent about aesthetic or town-planning matters (and the universities are not exempt from this), the controversy has at least given the Minister the advantage of knowing that there are some issues about which some sections of the public can feel profoundly indeed.

A more ugly facet which comes to light is the hopeless situation when a town is not free to plan itself. Cambridge is a city with borough status, and not a county borough like Oxford, and having lost its planning powers under the 1947 Planning Act has to have its planning done for it by the County Council of Cambridgeshire. The last interesting point that the controversy illuminates is that so long as the law requires that an inquiry should be held only into objections, it is impossible to get a true picture of the rights and wrongs of a plan since those who benefit by a plan usually wisely refrain from admitting it, least of all in public. In public inquiries, "the evil that men do lives after them, the good is oft interred with their bones." And even now the controversy is by no means finished since the latest move is that the Cambridge City Council are seeking action in the High Court on the ground that, for certain reasons connected with procedure, they hold the plan to be invalid.

Why has such a fuss been made about Cambridge? The answer is that Cambridge

is unique. Cambridge now is England's only true university city. Unlike Oxford, it has managed to avoid invasion by mass-production industry. But that does not mean to say that Oxford is in the main stream of life and Cambridge is in a back-water, for Cambridge is indeed a regional centre and a thriving county market town of about 80,000 inhabitants. In spite of this, the University is by far the most dominating influence in the city. Its arrangement and street pattern is mediaeval in form and very compact, resembling an elongated spider hanging on to the middle of a somewhat broken web. Yet Cambridge has more open space than almost any other town in England; from Grantchester in the south the meadows flow into the town with the river, and accompany it in a broad band along the incomparable "Backs" to Magdalene Bridge, finally fanning out again into the countryside beyond Midsummer Common. The famous Backs of the colleges provide us with perhaps the finest piece of urban landscaping in Europe, a dramatic composition of river, greensward and trees, set against the curiously harmonious diversity of the architecture of the colleges. There are, however, few towns with more congested streets than Cambridge. Since 1911 the traffic has increased tenfold, but the streets have remained the same. Then there are the bicycles, 40,000 of them; so many, in fact, that the undergraduates seem to treat them like family umbrellas and help themselves at random from the almost inexhaustible stock that seems permanently propped up against every wall and curb. And what more characteristic sound can be heard than the falling of bicycles on a windy day? To be born within the clatter of that music is to be a true Cambridge citizen!

The Cambridge Plan was prepared by Sir William Holford and Professor Myles Wright, who were the town-planning consultants called in by the County Council. In 1950 the proposals were published by the Cambridge University Press in two handsome volumes, and it was not until the autumn of 1952 that

a public inquiry was held into the objections against the plan. This inquiry went on for no less than ten weeks, after which the Minister of Housing and Local Government spent almost another two years deliberating on its findings, and finally this summer decided to uphold most of the provisions of the plan put forward to the County Council by the consultants.

What are the peculiar problems of Cambridge, and what are the principal recommendations that have been accepted? The first thing the consultants recommend is that the function, the character and the size of Cambridge should remain more or less as it is. Therefore, any new industry that comes into Cambridge and that threatens to make it grow has to be sifted very carefully. Big mass-producing industries wanting to come to Cambridge are already finding they cannot get through the sieve, but firms with laboratories and experimental stations may be lucky

enough to filter through, since they are the kind of industries that rely upon university brains. It is not intended that more than 20,000 new population will be added to the town within the next twenty years, and in any case the new communities will be placed, for the most part, in villages just outside the town, such as Barton, Madingley and Teversham.

The crux of the plan, over which the battle has been raging, is the appalling traffic congestion in the main road, Regent Street, St Andrews Street, Sidney Street and Bridge Street. This road cuts through the town from south-east to north-west, and is a trunk road. The proposal is to mitigate the congestion by providing what is described as a "spine relief road", i.e. a supplementary central route, which from the main road follows the line of Emmanuel Street until it reaches the bus station, which is to be considerably enlarged, and then it proceeds to drive across the tree-





All photographs, except one, by J. A.

The plan of Sir William Holford and Professor Myles Wright, commissioned by the Cambridgeshire County Council, contains proposals for the relief of traffic congestion in Cambridge, including the creation of a "spine relief road" that would divert traffic away from a university "precinct". The precinct would preserve this charming corner of St John's Street in dignified calm. The entrance to St John's College is one of the finest Tudor gatehouses in England. Trinity College Chapel appears on the left

King's Parade is one of the most impressive and yet intimate streets in England, with a curiously harmonious diversity of architecture. The 15th-century King's College Chapel is on the left; with Gibbs's Senate House at the far end. This street, as part of the university precinct, will lose a good deal of its excessive traffic when the plan is carried out. For four hundred years town and gown have mingled here; it is proposed in the plan that shops with students' rooms over them will continue to exist in King's Parade and its vicinity





One gets a magnificent view over the Backs from Queen's Road. For some time this beautiful avenue has been used as a trunk road taking heavy lorries at high speeds. The town planners want this to become a slow-traffic road, like those in the Royal Parks of London, and to be closed to commercial vehicles



The worst problem in Cambridge is the traffic, especially in Sidney Street (above), a main shopping street and part of the trunk road which traverses the heart of the city from north to south. Congestion here would be relieved by the much-discussed road that would cut across Christ's Pieces and the Jesus College grounds. (Below) The 40,000 bicycles in use in Cambridge increase the congestion, as this tableau in Downing Street graphically shows

Eastern Press Agency





Market Hill. This market, which is the ancient hub of the town, is going to be preserved by the plan. Pioneer steps will be taken to eliminate the plague of curbside car-parking by the erection near by of a big, open, ramped car-park, seven floors high—a solution that has proved successful in the United States but has not yet been tried out in this country

One of the bones of contention in the plan: Christ's Pieces. The County Council have submitted to the Minister of Housing and Local Government the proposal that a central relief road should cut across one side of this famous public open space. The suggestion has encountered violent opposition from the City Council of Cambridge, who are seeking to bring an action in the High Court to have the plan declared invalid





Jesus College's hockey-field: the other disputed open space, across which it is proposed that the relief road should run. This suggestion has also brought a hornets' nest about the ears of the planners, and objections couched in the strongest possible terms have been lodged by the Master of the College. The Minister has decided that this part of the road, and that across Christ's Pieces, should not be started at present, but should be left in abeyance for five years

lined avenues of Christ's Pieces, a beautiful and popular public open space. This bold suggestion is held by the opponents of the plan to be audacious if not sacrilegious, especially when it goes on to cut across the "domus" or grounds of Jesus College. This, not surprisingly, has brought a hornet's nest around the ears of the planners, and the fact that the Minister upheld this proposal has brought letters couched in the strongest terms from the Master of Jesus College. The Minister, however, in his statement made it clear that approval of the proposed route as part of the plan does not therefore carry with it any threat of early or irrevocable action, but on the other hand if the route is *not* left in the approved plan there is the risk that development might be carried out within the next few years which would seriously prejudice the construction of the road and make it impossible to achieve without even greater disturbance, a risk which the Minister considered it would be both imprudent and unreasonable to take. It was explained also that the practical effect of approval enabled the line of the road to be safeguarded during the next five years, at the end of which time the statutory review of the plan would take place in any case, when the matter could be considered further before any final decision was taken on this scheme for road construction.

Whereas the Master of Jesus College, as the acknowledged and respected custodian of her ancient rights and interests, was outraged at the Minister's even entertaining the line of this spine road at all, the City Council's objections to it seem to arise very largely from another quarter. In the days when they were their own planning authority they had themselves prepared an ambitious scheme for the widening of this congested main road. Compared with the spine relief road suggested by the consultants, this would seem to be a fantastically expensive solution, and possibly an ineffective one; and almost certainly it would seriously compromise the intimate character of parts of the historic centre of Cambridge. Personally, I believe that the spine relief road is the better solution to the awkward traffic problem. It gives the spider, so to speak, a vital new strand in the centre of its broken web. But at the expense of making the line of this strand a little longer and perhaps a little less straight, some of the objections might be overcome if the spine relief road were merely to *skirt* the western boundary of Christ's Pieces and, if possible, that of Jesus College's hockey-field instead of charging straight across them, in much the

same way as it is to skirt Jesus Green a little further along its course back to rejoin the main road.

The spider's web is refurbished in other parts of the plan, too. There is the problem of Queens' Road, the beautiful avenue that runs between the rather gaunt university library (described once as "that warehouse of knowledge"), and that enchanting sequence of greens from which one gets perhaps the loveliest view of college buildings in the world: the Backs of St John's, Trinity, Trinity Hall, Clare, King's, St Catharine's, and finally Queens', with their lawns sweeping down to the Cam with its elegant bridges. For some time this road has been used as a trunk road, carrying heavy lorries and vans at high speed. The consultants want this to become a slow-traffic road, like those in the Royal Parks of London, with a 20-miles-an-hour speed limit, closed to lorries and commercial vehicles. Meanwhile, the needs of traffic wanting to miss the centre of the town would in future be met by the provision of a new outer relief road further west, and forming the outermost strand of the web connecting the three important radial western exit roads: the Huntingdon, Madingley and Barton Roads. Similar improvements to the eastern periphery are to be made, linking up all the straight radials which go out to the east. The effect of these road proposals is to remove all unnecessary traffic from the University area, especially from the famous Trumpington Street and King's Parade. This street is a veritable treasure-house of architecture, and one of the most satisfying pieces of civic design in the country—satisfying because of its mixture of intimacy, dignity and strangely harmonious variety, not only in the variety of architectural styles but also in the curious sociological variety in which for three or four hundred years along King's Parade town and gown have mingled. Lined up opposite the colleges are the simple, unpretentious shops, which are entered from the street, while over them are the undergraduates' rooms on the first floor, which are entered from behind. This excellent arrangement is to be preserved and extended in the centre, where academic and commercial uses have always lain side by side.

One of the best provisions in the plan is the retention of the market, one of the oldest in England and still one of the most thriving, in Market Hill, less than a stone's throw from King's Parade. Here, in this hub of the town, Cambridge is to take pioneer steps in eliminating the plague of curbside car-parking, for



Times

Cambridge: an aerial view looking roughly north-west up Regent Street, with Parker's Piece in the right foreground. The line of dots on the right indicates the route of the proposed spine relief road across Christ's Pieces; that on the left the new Guildhall Street, leading to Market Hill

adjacent to the crowded market area in Guildhall Street there is to be a large, open, ramped car-park with parking platforms on every half-landing, extending upwards through seven-and-a-half floors. This solution, so successful in American cities, has not yet been tried out in England.

Then there is the bus station, which lies just behind Christ's College and in front of the much-disputed Christ's Pieces. Strong arguments were put forward to shift it from its present central position further out, but the consultants, espousing the cause of the Cambridge housewife with her heavy shopping baskets, said, "It should remain where it is, but it should expand," and for this purpose it is proposed to take over a certain amount of rather old property between Christ's and Emmanuel Colleges. However, the Minister's decision on this was a sort of Solomon's judgment; he decreed that it should neither go out nor expand, but that it should remain just as it is for five years. In any case since its site was immediately adjacent to the point where the spine relief road enters Christ's Pieces the fate of the road and of the bus station would undoubtedly be tied up together.

Any surgeon called in to perform an operation upon a distinguished and venerable

patient is bound to meet with abnormally irritable opposition from the family, especially if the operation is performed at the behest of an overriding grandmother who in any case demands annually no less than two-thirds of the patient's income! Such is the situation between Cambridge and her overriding County, which takes a large share of her rates and plans her future.

The able 'civic surgeons', whose responsibility is to think more about the future than about the present, have quickly grasped that the future of Cambridge and its University can best be assured by arresting the process of congestion and perilous hardening of the central arteries of the town as speedily as possible. None of the cures that have been proposed for the centre or other parts of the town appear to me (as they have to some) to be so drastic that they will kill the patient. On the contrary, great care has been taken to see that the essential character and virtues of the town shall be constantly preserved against sudden influences and unforeseen events that would certainly tend to change it, for, as the authors of the Cambridge Report urge on the first page of their book, Cambridge must remain what it is, "one of the most pleasant places on earth in which to live."

From Utopia to UNESCO:

A Social Experiment in Mexico

by GEORGE WOODCOCK

One of the most urgent problems of our time is to discover how the new ideas and skills of urban and industrial society can be introduced to primitive rural communities without destroying their way of life. Failure to solve it means loss and, in the long run, danger to ourselves: through such experiments of the United Nations as that here described we can contribute to its solution

FOR many years the impact of the modern world on the villages of mountainous and lake-studded Michoacán was represented by the trickle of government officials and merchants and occasional tourists whose passage left the life of the native population in this beautiful Mexican State basically unaltered. The situation has changed a great deal since the last war, and this has been due in part to the foundation at Patzcuaro, once Michoacán's capital, of the first UNESCO International Centre for Fundamental Education. CREFAL, as the Centre is called locally from its Spanish initials, has already, in three years, become so much a part of the regional life around Lake Patzcuaro that everyone in the little Tarascan city has something to say about its activities.

The Centre is housed in a mansion built early in the present century, probably in the spacious days of the dictator Diaz, which was donated by Lazaro Cardenas, the former Mexican president; the grounds are wide and well cultivated, and dormitories and classrooms in the modern Mexican style are rising up on every side of the central building, while down towards the mountain-encircled lake runs an avenue of flagpoles for the emblems of the UNESCO nations. Yet the most influential activities of the Centre have taken place, not in this pleasant headquarters, but in the country around Patzcuaro.

It is first of all an experimental and training centre where social workers come from all parts of Latin-America to learn means of educating the inhabitants of primitive villages. The emphasis is not on formal training, but on inducing the people to change their living habits in such a way that a better standard of existence and

a consequent demand for further education will follow naturally. In this process the villages around Patzcuaro are being used as a trial ground, and their life is changing slowly but steadily.

This is not the first time that the Tarascan Indians who inhabit this region have been the subjects of social experiment. When the thunder grumbles in the hills that surround their lake, the older men still say: "It is Tata Vasco talking in his sleep." Four centuries of disturbed and eventful Mexican history have not eliminated from their minds the memory of Vasco de Quiroga, the first bishop of Michoacán who became one of the most passionate friends of the Indians.

Quiroga came to Mexico in 1530 as a lawyer appointed to the *audiencia*, a kind of royal commission to enquire into alleged misdeeds of the Spanish king's officials, particularly in their treatment of Indians. In his capacity of *oidor*, or investigator, Don Vasco paid particular attention to the province that had once been the great kingdom of the Taras-



A. J. Thornton



All photographs, except one, from UNESCO

The headquarters of the UNESCO International Centre for Fundamental Education at Patzcuaro, Mexico. Towards the lake runs an avenue of poles that bear the emblems of the UNESCO nations

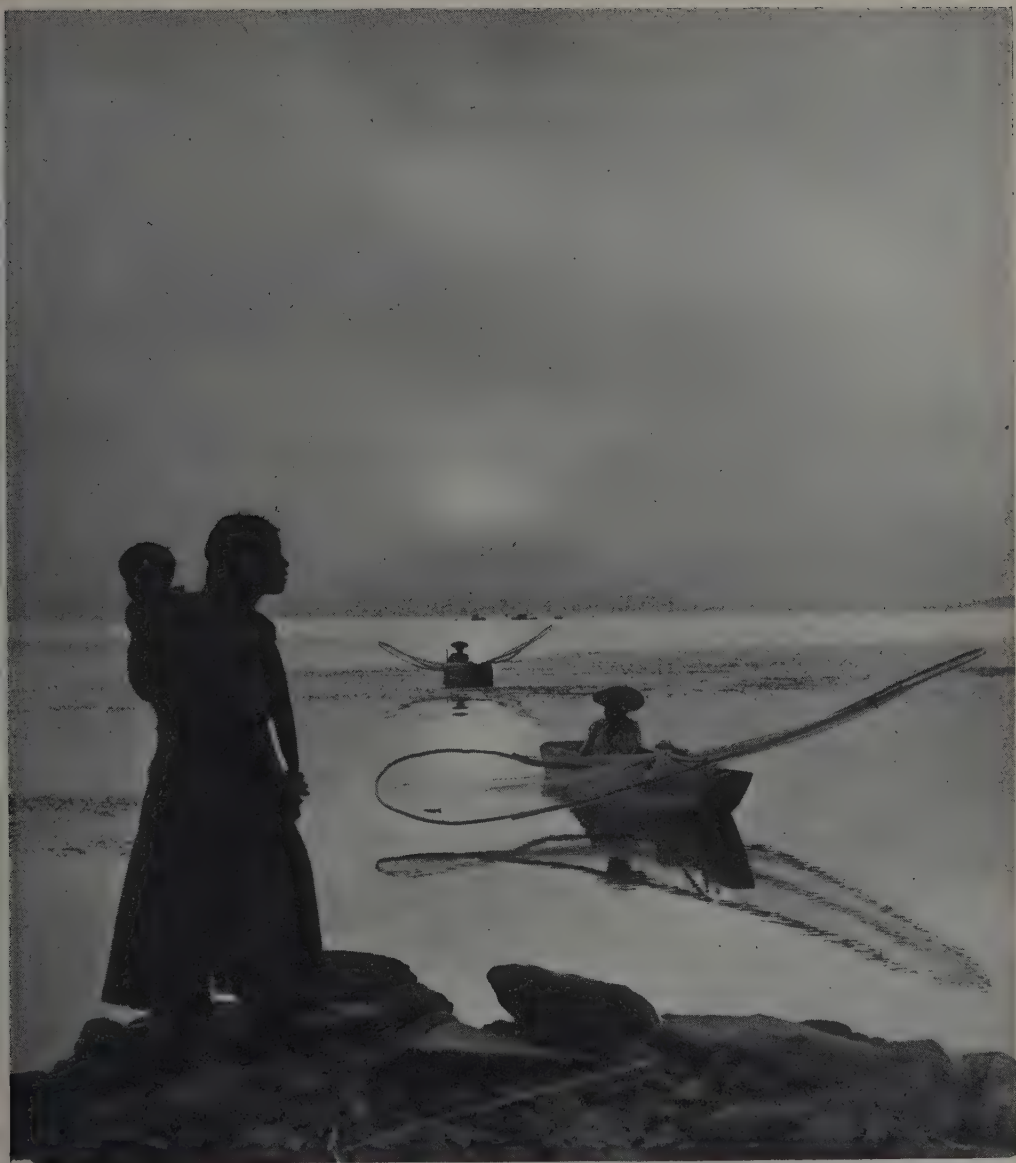
cans. The *caciques* of this tribe, who reigned at Tzintzuntzan, a city of 40,000 inhabitants on the edge of Lake Patzcuaro, governed a region which stretched as far as the shores of the Pacific. Its people practised a high civilization, and had ensured their independence during the latter part of the 15th century by inflicting on the Aztec armies their first major defeat before the arrival of Cortes.

The Tarascans did not accept the Spaniards with any more enthusiasm than they had the Aztecs, and a prolonged resistance in the west of Mexico led to a reign of terror and violent oppression by the Spanish leaders. The situation in Michoacán became so chaotic that in 1533 the royal authorities sent Vasco de Quiroga to establish order. His courage in defending their interests soon won the friendship of the Indians, whom he hoped to benefit by reconstructing their lives in accordance with ideas derived from Sir Thomas More's *Utopia*. These he proceeded to incorporate in a "Hospital-Pueblo" on the shore of Lake Patzcuaro, designed as a model for village communities in which all the land would be held in common, except for the cabin and garden assigned to each household. The herds were also communal, and each

man gave six hours a day to working on the Hospital-Pueblo's land or with its cattle. By this means, Don Vasco calculated, the Indians could become economically self-supporting again, and at the same time could be instructed in civilized arts and Christian beliefs by friars attached to each community.

Quiroga's plan was successful, not least because it developed cooperative tendencies which had already existed before the Spanish conquest, for both the Aztecs and the Tarascans had held land in common. He made enemies, however, among his compatriots who resented his efforts to turn the Indians into Christians without imposing servitude upon them, and he was accused of maladministration. Having been triumphantly vindicated, he was ordained, rapidly promoted, and consecrated Bishop in 1538. For the next thirty years he exerted an immense influence on the civil as well as the ecclesiastical government of Michoacán, dying in 1565, an indomitable nonagenarian, in the course of one of his arduous and unprotected episcopal journeys.

Even in his life the Indians regarded "Tata" (Father) Vasco as little less than a saint, and stories were spread about the miracles he had



From the author

A principal occupation of the Tarascan Indians who live around Lake Patzcuaro is fishing: elegant 'butterfly' nets are used by the fishermen to scoop up whitefish, which are greatly prized in Mexico. Here the men are returning home with the day's haul

performed. In the ensuing years the communities that he founded fell into decay; but most of the villages around Lake Patzcuaro date, in their existing form at least, from his time. The elements of European culture which were imported under his influence combined with Indian survivals to give the Tarascans a distinctive local pattern of living which they have preserved with a great deal of tenacity through the years of Spanish dominion and Mexican independence.

When, one hot November day, we travelled through the Michoacán hills and pine forests from Chapala and, following the high road above Lake Patzcuaro, came down into Quiroga, a modern village within the ancient bounds of Tzintzuntzan, it was evident from a number of signs that the way of life here was very different from the more hispanicized patterns of the people of Jalisco and Guanajuato among whom we had previously travelled.

The houses in Quiroga, like those in Patzcuaro and other smaller towns in the vicinity, were of a quite different style from that customary in urban Mexico. Instead of the usual flat Moorish type of roof, these had sloping roofs, heavily tiled, with widely overhanging eaves and beams carved at their ends. The house walls were coloured with pale green, pink or yellow washes, and their windows lacked the customary Spanish-type grilles. This kind of architecture gave a much less withdrawn feeling to the houses than that of most Mexican town dwellings, which centre inward on the *patio*. The general effect of the Tarascan streets was distinctly in that international Alpine tradition which seems to pay no regard to continent or frontier, and, standing nearly 7000 feet above the sea, they reminded one of Basque towns in the Pyrenees or of some of the mountain villages of the Franche-Comté.

The hostility that seems to exist on both sides between Mexican creoles and any kind of markedly Indian society was illustrated by the remark of a Mexico City man who, as we left the bus, said to our anthropologist companion: "Look out for your wallet here. It's a bad place." We had no reason at all to respect his warning. In fact, our experience was to the contrary, for two days later, when I left a briefcase on a bus in Patzcuaro, it was returned to me immediately by a little Indian boy who had been sent after me by one of the peasant women.

Between Quiroga and Patzcuaro, and all along the farther side of the lake, lie the tiny Indian villages clutching the shore,

and sometimes spreading onto the offshore islands. The people in them live by a mixed kind of economy. Their principal industry is fishing; they catch the famous *pescado blanco*, or whitefish, which is found only here and in Lake Chapala. There are other fish in the lake, but they are mostly dark-fleshed and of inferior quality. The fishermen still use the dugout canoes and round-headed paddles of their ancestors before the Spanish conquest. Some of them work with a kind of seine, but often they use the 'butterfly' hand-net; this has a cane frame which the fisherman holds as he drifts in his boat and slides gently under any fish that may be swimming near the surface. During the winter the fishermen often turn into wild-fowlers, catching duck with a trident projected by an archaic spear-thrower, the *atlail*.

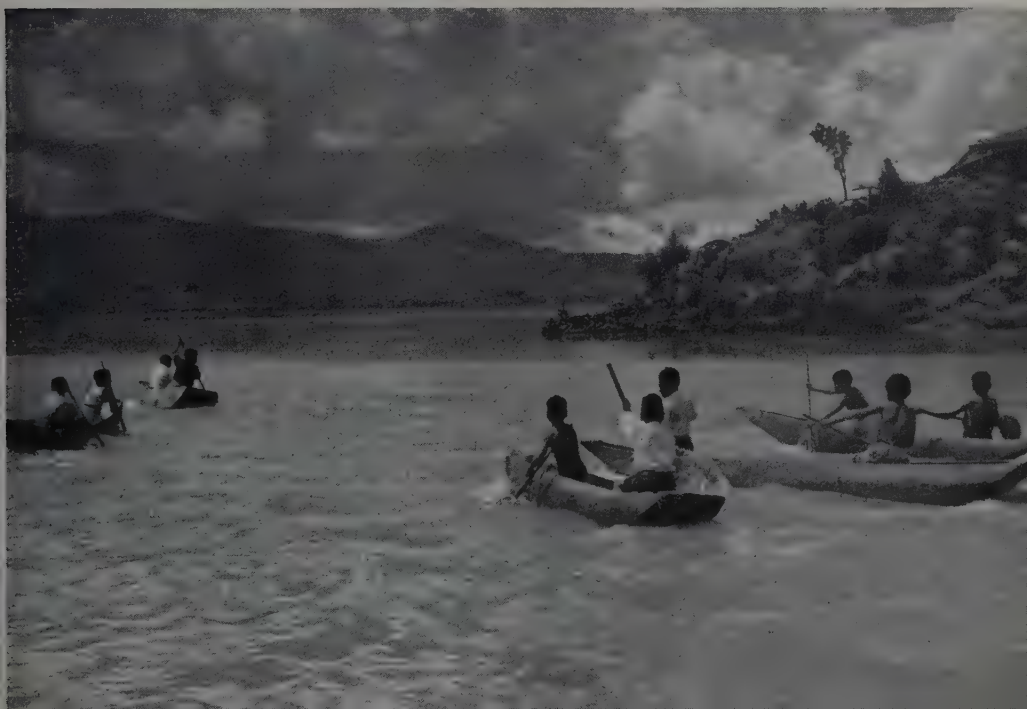
Generally speaking, the Tarascan's way of life is still not very far removed, in techniques and cultural patterns, from that hybrid of the Indian and the Spanish which was established in Don Vasco's day. He grows some European plants like wheat and onions and chickpeas, but his basic crops are still the native maize and beans. He uses an ox to draw the wooden plough of the mediaeval Spanish peasant, but he cultivates with the Indian hoe. Fortunately the hills of Michoacán have largely escaped the wholesale deforestation that has turned so much of Mexico into man-made desert, and thus the Tarascan farmer is not faced quite so acutely with dangers of erosion and drought as his neighbours to the north and east. On the other hand, his land has been largely worked out through the absence of a proper crop rotation and the insufficient application of fertilizers.

The lack of rudimentary ideas of conservation which are shown in the Indian methods of farming has also resulted in a steady diminution of the available stocks of fish. Originally, when the Indians sought only their own supplies, there was always more than enough for their needs. But for many years fish has been exported to Morelia, to Mexico City and elsewhere, and this drain, together with the wasteful methods of the fishermen, who rarely throw back the small fish, and the comparatively recent introduction of the predatory black bass, has resulted in an increasing scarcity and a consequent disturbance of the economic balance in the lakeside settlements.

Mechanization has affected the Tarascans very sporadically. Some villages have electricity and others are still without it, while by



(Above) Tarascan fishermen and boys wait for the beginning of a canoe race, while the village band—indispensable to Mexican festivities—plays in the background. The heavy-roofed houses, unlike the usual style of Mexican urban architecture, are characteristic of Michoacán. (Below) The race in full career: boys paddling their fathers' dugouts. These are the main form of transport on Lake Patzcuaro





(Above) Many of the houses in the villages round Lake Patzcuaro are primitive one-room structures of adobe brick; the people eat and sleep upon their earthen floors. (Below) Water is often drawn from insanitary wells and holes in the ground and disease is all too common. The UNESCO Centre has done much to improve matters by installing pumps and protecting the water from contamination





A schoolroom in a Tarascan lakeside village. The scanty funds available in these rural regions are reflected in the meagreness and decrepitude of the schools and their equipment. The UNESCO Centre's staff and students have made great efforts to increase the local educational facilities

no means every cottage even in those places which are supplied can afford an installation. The bus is probably the most used mechanical contrivance. Trucks, although they are to be seen in most places where there are roads, have still a long way to go before they will even equal the many non-mechanical forms of transport—the ox-cart, the pack-horse and donkey, the human back. The sewing machine is fairly common, but it is used in connection with the hand-loom and the primitive spindle, though there is an increasing tendency, particularly among the poorer women, to use shoddy but cheap Mexican-made prints instead of hand-woven fabrics. The radio is used by middle-class townspeople, but rarely by the villagers, though a wireless blares loudly on every bus. The fiestas of the Saints' days, conducted with firework 'castles', brass bands and groups

of dancers re-enacting ancient traditions, are still the most popular entertainments. But the Tarascan, when he can afford a peso, will often go to the cinema at Patzcuaro and sit silently through an undubbed American Western whose Spanish sub-titles he may not be able to read.

Formal education in the lakeside villages is usually fragmentary. It is probable that the level of literacy, except in Patzcuaro itself, is no higher than the Mexican rural average of one in three; it must further be remembered that in this context literacy may mean the most painfully slight ability to read and write. In religion the Tarascan is nominally Christian and, despite the total closing of some churches and the neglect of many others during the revolutionary period of the 1920s and 1930s, Catholic practices seem to be on the increase in this part of Michoacán.

Two churches in Patzcuaro were undergoing extensive internal reconstruction while I was there, an unusual sight in modern Mexico, and attendances seemed high. At the same time, the farmers still carry on fertility rituals derived from the pagan past. They believe in sorcery and prefer the native *curandera*, or wise woman, with her herbal and magical remedies, to the physician. They have little sense of preventive hygiene, and suffer from a high incidence of ailments due to impure water and insanitarly prepared food. Many of their children die from these causes, and a group of Tarascan men carrying a little white coffin slung on a pole is a common enough sight around the lake. No mourning

is displayed on these occasions, for the child that has died before confirmation is an *angelito*, and is entitled to go straight to Heaven without judgment; to show grief at its funeral might impede its passage there.

The Centre for Fundamental Education has not sought to deprive the Tarascans of the satisfying aspects of their pattern of living, or to subject them to an alien mechanical culture, or, for that matter, to follow Quiroga's example of experiments in Utopian social organization. Rather, it has concentrated on seeking ways and means by which its field-workers, operating in collaboration with the villagers themselves, can study their problems and arouse in them a

desire to work towards the betterment of their own conditions. To stimulate the farmers and fishermen to do something for themselves is always regarded as a better achievement than to do it for them. Where possible, the aim is to make use of existing skills and resources rather than to get help from outside, to realize the full potentialities of an existing pattern of living rather than try to replace it by something radically new. Learning from those well-meant but tragic failures to impose sweeping changes on popular ways of thinking that have marred Mexican history, CREFAL makes no effort to change the political or religious beliefs of the people among whom it works.

In planning its activity, the Centre deliberately left out of consideration the two major urban communities in the area, Patzcuaro and Quiroga, and concentrated on about twenty villages, some on the lake and others in the hills around it, with a total population of ten thousand, of whom the vast majority are either fishermen or land-workers. The organizers of this plan doubtless realized that the mere presence of the Centre would have an influence far beyond the actual sites of its work, but they wisely decided against an undue diffusion of activity, and also

UNESCO workers at Patzcuaro have followed the principle of encouraging the Tarascans to improve their own conditions. (Below) The agricultural expert of the Centre for Fundamental Education showing a Tarascan farmer how to use a tractor





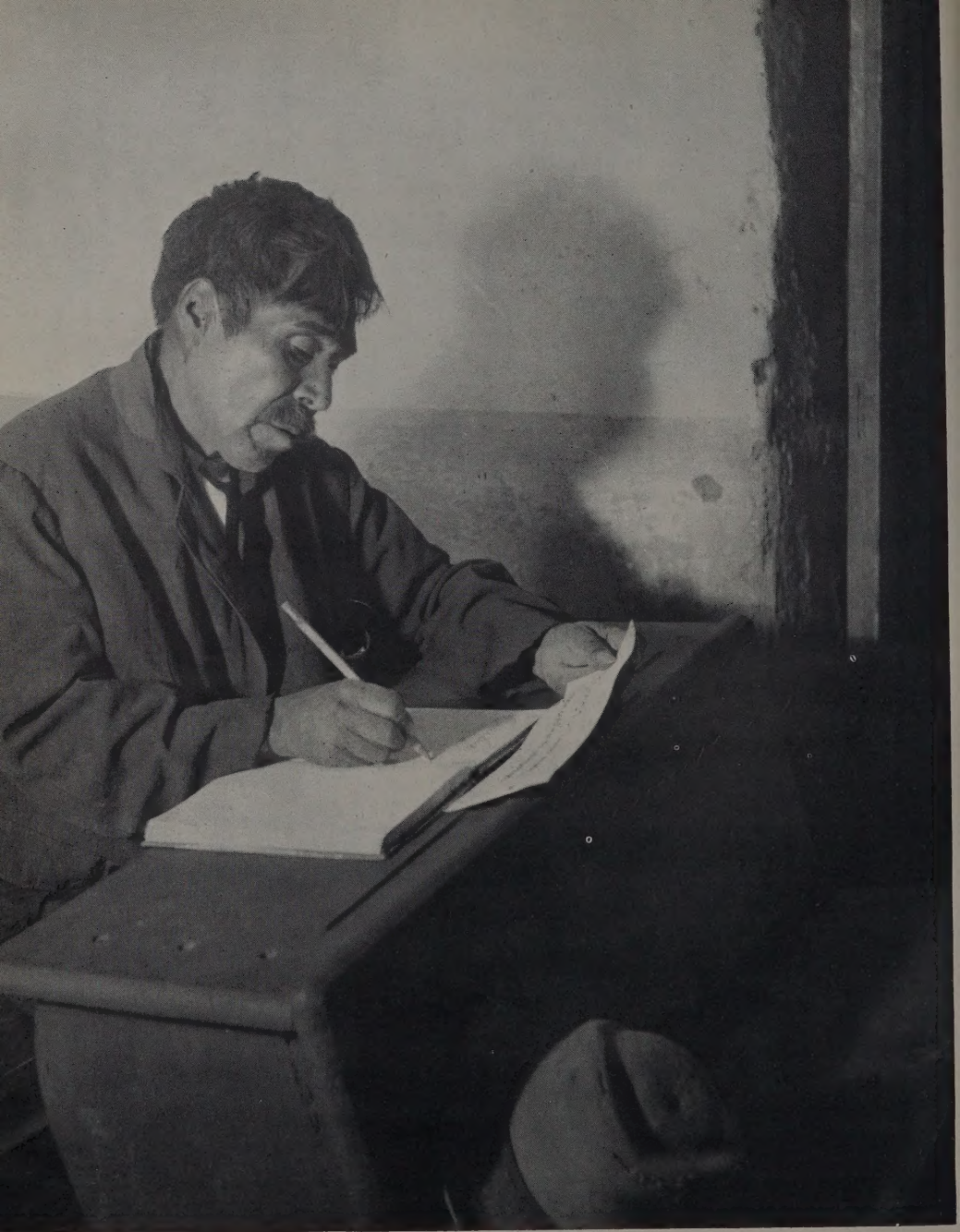
A field-worker discussing the problems of domestic economy with an Indian housewife. The latter is grinding corn on a metate, one of the hardest and most time-consuming occupations of Tarascan women, who may spend four to six hours a day preparing enough maize dough for the family's meals

against the temptation to confuse the somewhat different problems of strictly rural and semi-urban populations.

The students who attend the Centre—there are about two hundred of them—have already some experience in social work. They are divided into groups of five or more, each group preferably from the same Latin-American country and including specialists in hygiene, agriculture, the domestic arts, recreation and teaching. Their work begins with discussion seminars, followed by surveys of the villages to which they are assigned and then by the actual field work. Among the villages the students appear first as visitors and, instead of trying to impose themselves in any way, work obliquely to win confidence through sympathetic discussion of the various difficulties of which the villagers are conscious and the offering of practical suggestions to solve them. From here it is not a long step to the suggesting of improvements of whose necessity the Indians are not so acutely conscious, such as the substitution of hygiene for

magic in the preservation of health.

In less than three years the results of this approach have been impressive. In some cases the field-workers have persuaded the villagers to make changes in daily life which are small in themselves but which make an appreciable difference in terms of labour. To give one example, an extremely tiring part of the women's work is grinding corn on the *metate*, the primitive stone saddle-quern which is used in almost all rural Mexican communities. Mechanical or even hand-turned mills are usually beyond the means of the Indians, and, in accordance with their principle of encouraging the discovery of ways of reducing labour with a minimum of outside help, the field-workers showed that if the metate were raised on a stand, the task of grinding would be much less tiring than when it is performed in the usual manner, with the woman kneeling on the ground. A small improvement, perhaps, but important for its total effect in alleviating the housewife's lot.



A middle-aged peasant sits himself down to learn the reading and writing which will help him to master the new techniques—both of farming and of living—that such agencies as the UNESCO Centre are bringing to him and his fellow-Tarascans



(Above) In the main square of Patzcuaro a group of UNESCO students give a puppet show to amuse and educate villagers in for market-day. (Below) The UNESCO Centre distributes illustrated publications on better methods of cultivation: here an Indian youth pauses in the market-place to study one of these



Some of the other achievements of this campaign of self-help have been more impressive. One village lay on an island separated from the shore by muddy shallows over which the only means of access was by canoe. After the CREFAL workers had been going there for some time the villagers decided that it would be a good thing for them to have a road to travel over. Accordingly, with some help from the Roads Service, they built a 500-yard causeway and their community was for the first time connected with the shore. More than that, they cut and shaped the poles necessary for an electricity supply service, ferried them over the lake, and erected them in place so that the supply authority need only fix the wires. Other villages have been inspired to build roads connecting themselves with main highways, have rebuilt dilapidated schools, improved water-supplies and laid out courts for recreation.

Another direction in which CREFAL has been active is in the fostering of cooperative activity among the villagers. Cooperation was once a dominant feature in Indian life, and it was the virtue which Don Vasco most sought to inculcate. But in recent years one of the most marked tendencies in Indian groups had been towards a growth in self-seeking and a diminution of the old communal feelings. The desire to become individually prosperous, to rise above the depressed levels of village life, has driven many of the younger men to seek a better life in that Mecca of the Mexican poor, the southwest of the United States; through ignorance, they have often been sadly exploited. Despite such disintegrating influences, cooperative methods have been successfully reintroduced into Tarascan settlements. Purchasing cooperatives for farmers are perhaps the most important, but in one village a decaying straw-hat industry was brought back to life by the introduction of thorough-going cooperation, while on a much more humble level the village women have learnt the value of clubbing together to buy communal sewing machines.

At least some progress has been made in persuading the Tarascans to take advantage of modern medicine in treating both human and animal diseases, and there are signs that the curandera is becoming a less important member of the community, particularly since cleaner water supplies, latrines and improved housing have already brought about a decrease in the chance of disease.

To give further depth to the often precarious village economies, the CREFAL

workers have encouraged the extension of existing handicrafts and the introduction of new ones. Where it seems to fulfil a need without forming a disturbing influence in the village economy, the cautious introduction of machinery has been encouraged, but the lack of capital among most of the Tarascans has never been lost sight of. Indeed, one interesting project was devoted to making toys out of discarded materials; as a demonstration, five hundred toys, which sold for 2500 pesos, were made for 56 pesos. The importance of a low-cost industry of this kind in an initially poor community is evident, particularly at a time when more tourists are finding their way into Michoacán.

One vital fact to emerge from the work of the Centre has been the slight initial desire of most adult villagers for formal education. To them, reading and writing did not seem so important as practical skills; the field-workers therefore refrained from pushing the question of literacy, only to find that, as new skills were acquired, there arose a spontaneous demand for literacy from the very people who before had shown themselves disinclined to accept it. This experience showed that to the adult Indian mind learning only becomes a desirable thing when some practical need for it arises, and revealed a major flaw in some educational campaigns in Latin-American countries which have sought to impose literacy for its own sake on adult populations.

The Patzcuaro experiment has undoubtedly produced an early dividend in the evolution of sound methods of encouraging and assisting village people to improve in an organic manner their traditional patterns of living. That this kind of development is preferable to the forcible imposition of alien ways of life will hardly be disputed; whether it will be able in the long run to compete with more disturbing kinds of modernization—represented in the Tarascan region by the arrival of the cinema, by the impact of motor transport and tourists, by the influence of the *mestizo* (mixed Spanish and Indian) urban nucleus in Patzcuaro itself, and by the temptation to emigrate to the United States—is difficult to foretell. One can only hope that the gentle inoculation provided by such institutions as CREFAL will immunize the Tarascans against the destructive aspects of contemporary industrial society and will enable them and other similar communities on the American continent to make their own distinctive contributions to the world of the future.